

Safety Data Sheets

CHSS



Bldg A, Bisbee

11/25/2019



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SECTION 1: Identification

1.1. Product identifier

3M(TM) Desk & Office Cleaner Wipes, #CL563

Product Identification Numbers

70-0051-5275-9, 70-0712-2512-5

1.2. Recommended use and restrictions on use

Recommended use

Cleaner, Cleaning wipe for office surfaces

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Office Supplies Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2B.

2.2. Label elements

Signal word

Warning

Symbols

Not applicable

Pictograms

Not applicable

Hazard Statements

Causes eye irritation.

Precautionary Statements

Prevention:

Wash thoroughly after handling.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Notes to Physician:

Not applicable

2.3. Hazards not otherwise classified

None.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
WATER	7732-18-5	90 - 99
2-BUTOXYETHANOL	111-76-2	0 - 1 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you are concerned, get medical advice.

Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Non-combustible. Use a fire fighting agent suitable for surrounding fire.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide
Carbon dioxide

Condition

During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

No unusual fire or explosion hazards are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Observe precautions from other sections.

6.2. Environmental precautions

Not applicable.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
2-BUTOXYETHANOL	111-76-2	Amer Conf of Gov. Indust. Hyg.	TWA:20 ppm	
2-BUTOXYETHANOL	111-76-2	US Dept of Labor - OSHA	TWA:240 mg/m3(50 ppm)	Skin Notation

Amer Conf of Gov. Indust. Hyg. : American Conference of Governmental Industrial Hygienists

American Indust. Hygiene Assoc : American Industrial Hygiene Association

Chemical Manufacturer Rec Guid : Chemical Manufacturer's Recommended Guidelines

US Dept of Labor - OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Not applicable.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Wear eye/face protection. Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Safety Glasses with side shields

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Butyl Rubber

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:	Solid
Specific Physical Form:	Non-Woven Material
Odor, Color, Grade:	Clear liquid on a nonwoven wipe with lemon scent
Odor threshold	<i>No Data Available</i>
pH	11.8 [<i>Details: Liquid portion</i>]
Melting point	<i>Not Applicable</i>
Boiling Point	212 °F [<i>Details: Liquid portion</i>]
Flash Point	No flash point
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapor Pressure	18 mmHg [@ 68 °F] [<i>Details: Liquid portion</i>]
Vapor Density	<i>No Data Available</i>
Density	1 g/ml [<i>Details: Liquid portion</i>]
Specific Gravity	1 [<i>Ref Std: WATER=1</i>] [<i>Details: Liquid portion</i>]
Solubility in Water	Complete
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	<i>No Data Available</i>

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

No health effects are expected.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
------	-------	---------	-------

Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
2-BUTOXYETHANOL	Dermal	Rabbit	LD50 400 mg/kg
2-BUTOXYETHANOL	Inhalation-Vapor (4 hours)	Rat	LC50 2.2 mg/l
2-BUTOXYETHANOL	Ingestion	Rat	LD50 560 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
2-BUTOXYETHANOL	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
2-BUTOXYETHANOL	Rabbit	Severe irritant

Skin Sensitization

Name	Species	Value
2-BUTOXYETHANOL	Guinea pig	Not sensitizing

Respiratory Sensitization

Name	Species	Value

Germ Cell Mutagenicity

Name	Route	Value
2-BUTOXYETHANOL	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
2-BUTOXYETHANOL	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
2-BUTOXYETHANOL	Dermal	Not toxic to development	Rat	NOAEL 1,760 mg/kg/day	during gestation
2-BUTOXYETHANOL	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 100 mg/kg/day	during organogenesis
2-BUTOXYETHANOL	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.48 mg/l	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
2-BUTOXYETHANOL	Dermal	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL 902 mg/kg	6 hours
2-BUTOXYETHANOL	Dermal	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 72 mg/kg	not available
2-BUTOXYETHANOL	Dermal	kidney and/or	Some positive data exist, but the	Rabbit	LOAEL 451	6 hours

		bladder	data are not sufficient for classification		mg/kg	
2-BUTOXYETHANOL	Dermal	blood	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
2-BUTOXYETHANOL	Inhalation	blood	May cause damage to organs	Multiple animal species	NOAEL Not available	not available
2-BUTOXYETHANOL	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
2-BUTOXYETHANOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
2-BUTOXYETHANOL	Ingestion	blood	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
2-BUTOXYETHANOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	poisoning and/or abuse

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
2-BUTOXYETHANOL	Dermal	blood	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
2-BUTOXYETHANOL	Dermal	endocrine system	All data are negative	Rabbit	NOAEL 150 mg/kg/day	90 days
2-BUTOXYETHANOL	Inhalation	blood	May cause damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.12 mg/l	90 days
2-BUTOXYETHANOL	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.4 mg/l	14 weeks
2-BUTOXYETHANOL	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.15 mg/l	14 weeks
2-BUTOXYETHANOL	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Dog	LOAEL 1.9 mg/l	8 days
2-BUTOXYETHANOL	Ingestion	blood	Causes damage to organs through prolonged or repeated exposure	Multiple animal species	NOAEL Not available	not available
2-BUTOXYETHANOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available

Aspiration Hazard

Name	Value

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 1 Flammability: 0 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 2 Flammability: 0 Physical Hazard: 0 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

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3M USA SDSs are available at www.3M.com

Safety Data Sheet

1. IDENTIFICATION

Product Identifier: 70% ISOPROPYL ALCOHOL

Date of Revision: January 31, 2018

Product Code: G697

Other Name(s):

Distributed By:

Recommended Use and Restrictions on Use:

Manufactured By: Ostrem Chemical Co. Ltd.
2310 - 80th Avenue NW
Edmonton, Alberta, Canada T6P 1N2
www.ostrem.com

Phone: 780-440-1911
In Case of Emergency Only, Phone
CANUTEC: 613-996-6666

2. HAZARDS IDENTIFICATION

Classification of the Mixture: Eye Damage/Irritation - Category 2A
Specific Target Organ Toxicity (Single Exposure) - Category 3
Flammable Liquids - Category 2

Label Elements:

Hazard Pictogram(s):



Signal Word: DANGER

Hazard Statement(s): Causes serious eye irritation.
May cause drowsiness or dizziness.
Highly flammable liquid and vapour.

Precautionary Statement(s):

Prevention: Wash hands thoroughly after handling.
Avoid breathing dust, vapours or spray.
Use only outdoors or in a well-ventilated area.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Wear protective gloves, protective clothing, and eye/face protection.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a poison centre or physician if you feel unwell.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

Storage: Store in a well-ventilated place. Keep cool.
Keep container tightly closed.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Physical/health hazards not otherwise classified:

not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Conc.</u>	<u>CAS #</u>	<u>Common Names</u>
isopropanol (99%)	65 - 85%	67-63-0	isopropyl alcohol

4. FIRST-AID MEASURES

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Necessary Measures:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a poison centre or physician if you feel unwell.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

Most important symptoms, both acute and delayed:

Causes serious eye irritation.
May cause drowsiness or dizziness.

Indication of immediate medical attention and special treatment needed, if necessary:

not applicable

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the chemical (e.g.: hazardous combustion products):

May liberate carbon monoxide and carbon dioxide.

Special protective equipment and precautions for firefighters:

As for surrounding fire. Firefighters should wear full protective clothing and self contained breathing equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear appropriate protective equipment. See section 8.

Environmental precautions:

Prevent from entering sewers, waterways or low areas.

Methods and materials for containment and cleaning up:

Isolate hazard area and restrict access. Small spills: soak up with inert absorbent material and scoop into containers. Large spills: prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

7. HANDLING AND STORAGE

Precautions for safe handling:

Wash hands thoroughly after handling.
Avoid breathing dust, vapours or spray.
Use only outdoors or in a well-ventilated area.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not ingest. Avoid contact with eyes, skin and clothing.

Conditions for safe storage, including any incompatibilities:

Store in a well-ventilated place. Keep cool.
Keep container tightly closed.
Keep out of reach of children. Store in a cool, dry area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters - Exposure limits:

Ingredient:
isopropanol (99%)

Limit:
ACGIH TWA: 200 ppm
STEL 400 ppm

Appropriate engineering controls:

Provide exhaust ventilation to keep airborne levels below recommended exposure limits.

Respiratory protection:

If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator.

Other protection:

Wear protective gloves, protective clothing, and eye/face protection.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, colour etc.):	colourless liquid
Odour:	strong alcohol odour
Odour threshold:	not available
pH:	neutral
Melting/Freezing point:	-16°F / -26°C
Initial boiling point and range:	not available
Flash point:	12 C
Evaporation rate:	not available
Flammability (solid, gas):	not available
Upper/lower flammability or explosive limits:	not available
Vapour pressure:	not available
Vapour density:	not available
Relative density (specific gravity):	0.856
Solubility(ies):	100%
Partition co-efficient: n-octanol/water:	not available
Auto-ignition temperature:	not available
Decomposition temperature:	not available
Viscosity:	not available

10. STABILITY AND REACTIVITY

Reactivity:

This material is considered to be non-reactive under normal use conditions.

Chemical stability:

Stable.

Possibility of hazardous reactions:

not available

Conditions to avoid (e.g.: static discharge, shock or vibration):

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Incompatible materials:

Oxidizers

Hazardous decomposition products:

not available

11. TOXICOLOGICAL INFORMATION

POTENTIAL ACUTE HEALTH EFFECTS

Inhalation:	May cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed.
Eye contact:	Causes serious eye irritation.
Skin contact:	May cause mild skin irritation.
Skin absorption:	not available

POTENTIAL CHRONIC HEALTH EFFECTS

Inhalation:	not available
Ingestion:	not available
Eye contact:	not available
Skin contact:	not available
Skin absorption:	not available

Mutagenicity:

not available

Carcinogenicity:

This information, if applicable, can be found in Section 2.

Reproductive toxicity:

This information, if applicable, can be found in Section 2.

Sensitization of product:

This information, if applicable, can be found in Section 2.

Specific Target Organ Toxicity - single exposure:

This information, if applicable, can be found in Section 2.

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Specific Target Organ Toxicity - repeated exposure: This information, if applicable, can be found in Section 2.

Toxicological Data:

Ingredient:

isopropanol (99%)

Data:

not available

Other Toxicological Information on Ingredients:

12. ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial, where available): not available

Persistence and degradability: not available

Bioaccumulative potential: not available

Mobility in soil: not available

Other adverse effects: not available

Ecological Information on Ingredients: not available

13. DISPOSAL CONSIDERATIONS

Waste disposal: Disposal of all waste must be done according to local, provincial and federal regulations.

14. TRANSPORT INFORMATION

TDG classification: UN 1219; ISOPROPYL ALCOHOL; CLASS 3; PG II

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

16. PREPARATION INFORMATION

Prepared by: Technical Services Department, Ostrem Chemical Co. Ltd., Ph.: 780-440-1911

Date of Preparation: January 27, 2017

Date of Revision: January 31, 2018

This Safety Data Sheet may not be changed or altered in any way without the express knowledge and permission of Ostrem Chemical Co. Ltd.

End of Document

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor Occupational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072



IDENTITY (As Used on Label and List) 99.5% GLYCERINE USP

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I CAS# 56-81-5

Rumco Holding Group, Inc. Address (Number, Street, City, State, and ZIP Code) 1008 Whitaker Street Texarkana, TX 75501

Emergency Telephone Number 903-793-3174

Telephone Number for Information -same-

Date Prepared

JUL 13 1990

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
N/A				

Section III - Physical/Chemical Characteristics

Boiling Point	554°F 290°C	Specific Gravity (H ₂ O = 1)	1.2607 @ 25/25
Vapor Pressure (mm Hg.)	1.0MMHG @ 20°C	Melting Point	
Vapor Density (AIR = 1)		Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water	3.1		N/A

Appearance and Color

Miscible

Transparent, characteristic odor, liquid.

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	390°F, 199°C	Flammable Limits	Not detar.	LEL	UEL
Extinguishing Media	Water fog, alcohol foam, CO ₂ , dry chemical.				

Special Fire Fighting Procedures

NONE. Autoignition temperature 698°F, 370°C

Unusual Fire and Explosion Hazards

NONE

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	

Avoid strong oxidizing agents

Incompatibility (Materials to Avoid) Oxidizing material
 Hazardous Decomposition or Byproducts Acrolein

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

N/A

Section VI — Health Hazard Data

Route(s) of Entry: ^{Inhalation?} Remove to fresh air. ^{Skin?} N/A. ^{Swallowing?} Induce vomiting if large
 Health Hazards (Acute and Chronic) May cause eye irritation; flush with water 5 minutes.

Carcinogenicity: NTP? IARC Monographs? OSHA Required?

Signs and Symptoms of Exposure Heated vapors may cause severe irritation ---administer oxygen with overexposure.

Medical Conditions Generally Aggravated by Exposure See above

Emergency and First Aid Procedures If exposed to heated vapors, remove to fresh air/admin. oxygen and call physician.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
 Small spills: cover with absorbent material, soak up & sweep into drum.
 Large spills: Dike around spill & pump into suitable container.

Waste Disposal Method Reprocess or incinerate in accordance with local, state & Federal regulatic

Precautions to Be Taken in Handling and Storing Practical reasonable care and caution.

Other Precautions None specified.

Section VIII — Control Measures

Respiratory Protection (Specify Type) None normally needed.

Ventilation	Local Exhaust	Special
	Mechanical (General)	Other
Protective Gloves	Not required	Eye Protection
Other Protective Clothing or Equipment	N/A	not required

Work/Hygienic Practices Normal practices.

1. Identification

Product identifier **Acid Demand Reagent (ADR)**
Product code R-0853
Recommended use Use as directed by manufacturer for purposes directly related to water testing.
Recommended restrictions None known

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Taylor Technologies, Inc.
Address 31 Loveton Circle
 Sparks, MD 21152
 United States

Telephone (410) 472-4340 Monday–Friday, 8:00 a.m.–4:30 p.m.
Website www.taylortechnologies.com
E-mail Not available
Emergency phone number (800) 837-8548

2. Hazard(s) identification

Physical hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.
Health hazards Eye damage/irritation Category 2A
 Skin corrosion/irritation Category 2
Environmental hazards Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
Label elements



Signal word Warning
Hazard statement Causes serious eye irritation. Causes skin irritation.
Precautionary statement
 Prevention Wash skin thoroughly after handling. Wear protective gloves/eye protection/face protection.
 Response IF ON SKIN: Wash with plenty of water.
 IF SKIN IRRITATION OCCURS: Get medical advice/attention.
 Take off all contaminated clothing and wash it before reuse.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
 IF EYE IRRITATION PERSISTS: Get medical advice/attention.

 Storage None required
 Disposal None required
Hazard(s) not otherwise classified None
Supplemental information None

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Deionized water	Dihydrogen oxide	7732-18-5	99
Sulfuric acid	Hydrogen sulfate; Oil of vitriol	7664-93-9	0.01–0.1

4. First-aid measures

Inhalation	Move to fresh air. Give oxygen or artificial respiration if needed. Get medical attention immediately.
Skin contact	Immediately wash skin with soap and water. If symptoms persist or in all cases of concern, seek medical advice.
Eye contact	Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice.
Ingestion	Treat symptomatically. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If symptoms persist or in all cases of concern, seek medical advice.
Most important symptoms/effects, acute and delayed	Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching. Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. Firefighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Firefighting equipment/instructions	Firefighters should wear full protective gear. Evacuate the area promptly. Fight fire from upwind to avoid exposure to combustion products. Cool containers/tanks with water spray. Do not get water inside container. Move containers from fire area if it can be done without risk. Prevent fire-extinguishing water from contaminating surface water or the ground water system.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted
Hazardous combustion products	Sulfur oxides. Other irritating fumes and smoke.

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.
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Methods and materials for containment and cleaning up

This product is miscible in water.

Large Spills: Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewer, basements, or confined areas. Following product recovery, flush area with water.

Small Spills: Absorb spillage with noncombustible, absorbent material. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for reuse. For waste disposal, refer to section 13 of the SDS. Dilute acid with water and neutralize with dilute base. If not recoverable, dilute with water or flush to holding area and neutralize. Contaminated absorbent material may pose the same hazards as the spilled product.

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental precautions

Avoid discharge into drains, watercourses, or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in corrosive-resistant container with a corrosive-resistant inner liner. Store in original tightly closed container. Keep only in the original container. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (refer to section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Sulfuric acid (CAS 7664-93-9)	PEL	1 mg/m ³	Not applicable

U.S. ACGIH Threshold Limit Values

Components	Type	Value	Form
Sulfuric acid (CAS 7664-93-9)	TWA	0.2 mg/m ³	Thoracic fraction

U.S. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Sulfuric acid (CAS 7664-93-9)	TWA	1 mg/m ³	Not applicable

Biological limit values

No biological exposure limits noted for the ingredient(s)

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield. Provide an emergency eyewash fountain and quick-drench shower in the immediate work area.

Skin protection

Hand protection

Wear appropriate chemical-resistant gloves. Advice should be sought from glove suppliers.

Other

Wear appropriate chemical-resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

Thermal hazards

When necessary, wear appropriate thermal protective clothing.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contamination. Avoid breathing mist or vapor.

9. Physical and chemical properties

Appearance

Physical state	Liquid
Form	Liquid
Color	Clear colorless or nearly colorless
Odor	Odorless
Odor threshold	Not available
pH	2
Melting point/freezing point	Not available
Initial boiling point and boiling range	212°F (100°C)
Flash point	Not applicable (does not burn)
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit, lower (%)	Not applicable
Flammability limit, upper (%)	Not applicable
Explosive limit, lower (%)	Not applicable
Explosive limit, upper (%)	Not applicable
Vapor pressure	17 mm Hg
Vapor density	0.6
Relative density	1.00 g/cm ³
Solubility(ies)	
Solubility (water)	Soluble in all proportions
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
Viscosity	Not available
Other information	
Explosive properties	Not applicable
Oxidizing properties	Not applicable
Percent volatile	100%
Specific gravity	1.00

10. Stability and reactivity

Reactivity	This product is stable and nonreactive under normal conditions of use, storage, and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use
Conditions to avoid	Contact with incompatible materials. Do not use in areas without adequate ventilation.
Incompatible materials	Metal compounds. Nitromethane. Oxidizing agents. Sugars.
Hazardous decomposition products	None known. For hazardous combustion products, refer to section 5 of the SDS.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system
Skin contact	May cause slight or mild transient irritation
Eye contact	May cause severe irritation
Ingestion	May cause irritation, nausea, vomiting, and diarrhea

Most important symptoms/effects, acute and delayed

Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching.

Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Acute toxicity

This product is not classified as an acute toxicity hazard. See below for individual ingredient acute toxicity data.

Components	Species	Test Results
Sulfuric acid (CAS 7664-93-9)		
Acute		
<i>Dermal</i>		
LD ₅₀	Rabbit	Not available
<i>Inhalation</i>		
LC ₅₀	Rat	0.375 mg/L, 4 hours (mist)
<i>Oral</i>		
LD ₅₀	Rat	2140 mg/kg
Deionized water (CAS 7732-18-5)		
Acute		
<i>Dermal</i>		
LD ₅₀	Rabbit	Not available
<i>Inhalation</i>		
LC ₅₀	Rat	Not available
<i>Oral</i>		
LD ₅₀	Rat	>89840 mg/kg
Skin corrosion/irritation	Causes skin irritation	
Serious eye damage/eye irritation	Causes severe eye irritation	
Respiratory sensitization	Not expected to be a respiratory sensitizer	
Skin sensitization	Not expected to be a skin sensitizer	
Germ cell mutagenicity	Not expected to be mutagenic	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, NTP, OSHA, or U.S. ACGIH. Occupational exposure to strong inorganic acid mists containing sulfuric acid is carcinogenic to humans. The information located is insufficient to conclude that sulfuric acid itself is a carcinogen. IARC has concluded there is sufficient evidence that occupational exposure to strong inorganic acid mists containing sulfuric acid is carcinogenic to humans (Group 1). ACGIH has designated strong inorganic acid mists containing sulfuric acid as A2 (suspected human carcinogen). US NTP has listed strong inorganic acid mists containing sulfuric acid as a known human carcinogen. These classifications are for inorganic acid mists containing sulfuric acid and do not apply to sulfuric acid or sulfuric acid solutions.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)		
Not regulated		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity, single exposure	Not classified as a specific target organ toxicity – single exposure	
Specific target organ toxicity, repeated exposure	Not classified as a specific target organ toxicity – repeated exposure	

Aspiration toxicity Not expected to be an aspiration hazard
Chronic effects Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

12. Ecological information

Ecotoxicity This product is not classified as environmentally hazardous; however, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Sulfuric acid (CAS 7664-93-9) – Aquatic		
Acute		
<i>Algae</i>		
EC ₅₀	Green algae (<i>Pseudokirchneriella subcapitata</i>)	>100 mg/L, 72 hours
<i>Crustacea</i>		
EC ₅₀	Water flea (<i>Daphnia magna</i>)	29 mg/L, 24 hours
<i>Fish</i>		
LC ₅₀	Bluegill (<i>Lepomis macrochirus</i>)	16–28 mg/L, 96 hours
Persistence and degradability	Not available	
Bioaccumulative potential	Not available	
Mobility in soil	High water solubility indicates a high mobility in soil.	
Other adverse effects	No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion with the user, the producer, and the waste disposal company.

Waste from residues/unused products Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (refer to Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste-handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transportation information

DOT
Not regulated as dangerous goods

IATA
Not regulated as dangerous goods

IMDG
Not regulated as dangerous goods

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available

15. Regulatory information

U.S. federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory list.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated

CERCLA Hazardous Substance (40 CFR 302.4)
Sulfuric acid (CAS 7664-93-9)

SARA 304 Emergency Release Notification
Sulfuric acid (CAS 7664-93-9) 1000 lb.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
 Immediate hazard – yes
 Delayed hazard – no
 Fire hazard – no
 Pressure hazard – no
 Reactivity hazard – yes

SARA 302 Extremely Hazardous Substance

Chemical name	CAS number	Reportable quantity (lb.)	Threshold planning quantity (lb.)	Threshold planning quantity lower value	Threshold planning quantity upper value
Sulfuric acid	7664-93-9	1000	1000	Not applicable	Not applicable

SARA 311/312 Hazardous Chemical

Not regulated

SARA 313 (TRI reporting)

Chemical name	CAS number	% by weight
Sulfuric acid	7664-93-9	0.1–5

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)**

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Sulfuric acid (CAS 7664-93-9)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Sulfuric acid (CAS 7664-93-9) 6552

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Sulfuric acid (CAS 7664-93-9) 20% W/V

DEA Exempt Chemical Mixtures Code Number

Sulfuric acid (CAS 7664-93-9) 6552

Safe Drinking Water Act (SDWA)

Not regulated

U.S. state regulations**California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not regulated

Massachusetts Right-to-Know Act

Sulfuric acid (CAS 7664-93-9)

New Jersey Worker and Community Right-to-Know Act

Sulfuric acid (CAS 7664-93-9)

Pennsylvania Worker and Community Right-to-Know Act

Sulfuric acid (CAS 7664-93-9)

Rhode Island Right-to-Know Act

Sulfuric acid (CAS 7664-93-9)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

California Proposition 65 - CRT: Listed date/carcinogenic substance

Sulfuric acid (CAS 7664-93-9) This product is not an inorganic acid mist containing sulfuric acid; therefore, the Proposition 65 statement does not apply.

International inventories

Country(ies) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	yes
Canada	Domestic Substances List (DSL)	yes
Canada	Non-Domestic Substances List (NDSL)	no

Country(ies) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)	yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	yes
Europe	European List of Notified Chemical Substances (ELINCS)	no
Japan	Existing and New Chemical Substances (ENCS)	yes
Korea	Existing Chemicals List (ECL)	yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA)	yes

*A "yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(ies).

A "no" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(ies).

16. Other information, including date of preparation or last revision

List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists
AICS: Australian Inventory of Chemical Substances
CAA: Clean Air Act
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
CFR: Code of Federal Regulations
CSA: Canadian Standards Association
DEA: Drug Enforcement Agency
DOT: Department of Transportation
DSL: Domestic Substances List
EC: effective concentration
ECL: Existing Chemicals List
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
ENCS: Existing and New Chemical Substances
EPA: Environmental Protection Agency
HAP: hazardous air pollutants
HMIS: Hazardous Materials Identification System
HNOC: hazards not otherwise classified
HPA: Hazardous Products Act
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
ICAO: International Civil Aviation Organization
IECSC: Inventory of Existing Chemical Substances Produced or Imported in China
IMDG: International Maritime Dangerous Goods
IUCLID: International Uniform Chemical Information Database
LC: lethal concentration
LD: lethal dose
MARPOL: marine pollution
MSHA: Mine Safety and Health Administration
NDSL: Non-Domestic Substances List
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NOEC: no observable effect concentration
NTP: National Toxicology Program
NZIoC: New Zealand Inventory of Chemicals
OECD: Organisation for Economic Co-operation and Development
OEL: occupational exposure limits
OSHA: Occupational Safety and Health Administration
PEL: permissible exposure limits
PICCS: Philippine Inventory of Chemicals and Chemical Substances
PPE: personal protective equipment
RCRA: Resource Conservation and Recovery Act
RQ: reportable quantity
RTECS: Registry of Toxic Effects of Chemical Substances

RTK: right to know
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
SDWA: Safe Drinking Water Act
STEL: short-term exposure limit
TLV: threshold limit values
TSCA: Toxic Substances Control Act
TWA: time-weighted average
VOC: volatile organic compounds
WEL: workplace exposure limit

Disclaimer

The information in the Safety Data Sheet is offered for your consideration and guidance for safe handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

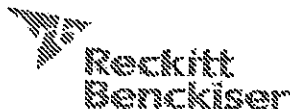
License granted to make unlimited paper copies for internal use only. This Safety Data Sheet may not be changed, or altered, in any way without the expressed knowledge and permission of Taylor Technologies, Inc. The information contained in this sheet is based on lab experience and the most current data available.

Issue date

April 2015

Last revision

April 2015



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

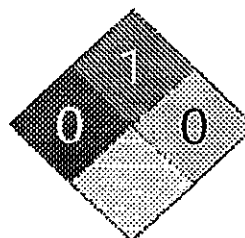
Product Name AIR WICK® Air Freshener (Aerosols All Scents)
CAS # Mixture
 This MSDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements of the U.S. Government's Occupational Safety and Health Administration (OSHA).
 This MSDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulation.

Air freshener Product Use

Distributed by Reckitt Benckiser
 Morris Corporate Center IV
 399 Interpace Parkway
 P.O. Box 225
 Parsippany, NJ 07054-0225
 In Case of Emergency: 1-800-338-6167
 Transportation Emergencies: 24 Hour Number:
 North America: CHEMTREC: 1-800-424-9300
 Outside North America: 1-703-527-3887

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	1	0
Corrosivity	1	
Physical Hazards	0	
Personal Protection	B	



2. Hazards Identification

Emergency overview CAUTION
 EYE IRRITANT. Prolonged or frequent skin contact may cause an allergic reaction.
 CONTENTS UNDER PRESSURE.
 DO NOT spray towards face. Avoid contact with eyes and skin. CONTAINER MAY EXPLODE IF HEATED. Do not puncture or incinerate container. DO NOT expose to heat or store at temperatures above 120°F (49°C) as the container may burst.

KEEP OUT OF REACH OF CHILDREN AND PETS.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation.

Eyes None expected during normal conditions of use.
 May cause eye irritation upon direct contact with the eyes.

Skin None expected during normal conditions of use.
 Prolonged or frequent skin contact may cause an allergic reaction.

Inhalation None expected during normal conditions of use.
 Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Ingestion Health injuries are not known or expected under normal use.

Target organs Eyes.

Chronic effects The finished product is not expected to have chronic health effects.

Signs and symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

OSHA Regulatory Status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects This product has not been tested.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Propane	74-98-6	7 - 13
Butane	106-97-8	10 - 30
Ethane, 1,1-difluoro-	75-37-6	10 - 30

4. First Aid Measures

First aid procedures	
Eye contact	If in eyes, IMMEDIATELY rinse eyes with plenty of water. Remove any contact lenses and continue rinsing eyes for at least 15 minutes. If irritation persists, get medical attention.
Skin contact	If on skin, wash with soap and water. If irritation develops, get medical attention.
Inhalation	Move to fresh air in case of accidental inhalation of vapors.
Ingestion	Rinse mouth with water and drink afterwards plenty of water. DO NOT INDUCE VOMITING.
Notes to physician	Treat patient symptomatically.
General advice	Do not puncture or incinerate container. Keep away from sources of ignition. No smoking. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.
	NOTE TO PARENTS: Intentional misuse by deliberately concentrating and inhaling aerosol products may be harmful or fatal. Help stop inhalation abuse; for information visit www.inhalant.org .

5. Fire Fighting Measures

Flammable properties	Non-flammable aerosol by flame projection test. NFPA AEROSOL LEVEL: Flammability Rating 1, per NFPA 30B
Extinguishing media	
Suitable extinguishing media	Dry chemical. Foam.
Unsuitable extinguishing media	Water. Water spray.
Protection of firefighters	
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame. Cool containers with flooding quantities of water until well after fire is out.
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep unnecessary personnel away.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not allow material to contaminate ground water system. Advise authorities if product has penetrated drains, sewers or water pipes.
Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Before attempting clean up, refer to hazard data given above. Remove sources of ignition. Although the chance of a significant spill or leak is unlikely in aerosol containers, in the event of such an occurrence, absorb spilled material with a non-flammable absorbent such as sand or vermiculite.

7. Handling and Storage

Handling

Ensure adequate ventilation.
 DO NOT spray towards face.
 Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C (120°F). Do not pierce or burn after use. Keep away from all sources of ignition. Fires involving aerosols with flammable contents are severe and can spread quickly. Warehouses or stores containing aerosols should therefore be separated from other areas by a fire resistant construction. Stores should be well ventilated. The natural ventilation in a large open warehouse building will normally be suitable.
 Do not spray on a naked flame or any other incandescent material.
 Use good industrial hygiene practices in handling this material.
 When using do not eat or drink.
 Wash hands before breaks and immediately after handling the product.

Storage

DO NOT expose to heat or store at temperatures above 120°F (49°C) as the container may burst.
 Do not puncture or incinerate container.
CONTAINER MAY EXPLODE IF HEATED.
 Keep away from heat, open flames or other sources of ignition.
 Store in a cool place.
 Keep out of reach of children.

NOTE TO PARENTS: Intentional misuse by deliberately concentrating and inhaling aerosol products may be harmful or fatal. Help stop inhalation abuse; for information visit www.inhalant.org.

8. Exposure Controls / Personal Protection

Exposure limits**Ingredient(s)****Exposure Limits**

Butane

ACGIH-TLV
 TWA: 1000 ppm
 OSHA-PEL
 Not established

Ethane, 1,1-difluoro-

ACGIH-TLV
 Not established
 OSHA-PEL
 Not established

Propane

ACGIH-TLV
 TWA: 1000 ppm
 OSHA-PEL
 TWA: 1000 ppm

Engineering controls

Provide adequate ventilation.

Personal protective equipment

Consult the product label for special protection or precautions that have been identified for using this product under directed consumer use conditions. The following recommendations are given for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure.

Eye / face protection

Not required under normal use conditions. Emergency responders should wear full eye and face protection.

Hand protection

No special requirements under normal use conditions. Emergency responders should wear impermeable gloves.

Skin and body protection

No special requirements under normal use conditions. Prolonged or frequent skin contact may produce an allergic reaction in some individuals.

Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Emergency responders should wear self-contained breathing apparatus (SCBA) to avoid inhalation of vapours generated by this product during a spill or other clean up operations.
General hygiene considerations	Avoid contact with skin, eyes and clothing. Washing with soap and water after use is recommended as good hygienic practice to prevent possible eye irritation from hand contact.

9. Physical and Chemical Properties

Appearance	Aerosol.
Color	Clear
Form	Misty spray
Odor	Characteristic
Odor threshold	Not available
Physical state	Gas
pH	Not available
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation rate	Not available
Flash point	Not available
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	Not available
Octanol/water coefficient	Not available

10. Stability and Reactivity

Reactivity	This product may react with oxidizing agents.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Keep away from open flames, hot surfaces and sources of ignition. Protect from sunlight and do not expose to temperatures exceeding 50°C (120°F). Extremes of temperatures can occur in cars and near ovens and fireplaces. Do not place in contact with hot surfaces or near naked flames. Do not pierce or burn after use. Do not spray on a naked flame, onto or near a fire, or any incandescent material such as an electric fire. Aerosol containers are unstable at temperatures above 49°C (120.2°F).
Incompatible materials	Caustics. Oxidizers. Acids.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Butane	Not available
Ethane, 1,1-difluoro-	> 64000 ppm rat
Propane	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
Butane	Not available
Ethane, 1,1-difluoro-	1500 mg/kg rat
Propane	Not available
Effects of acute exposure	
Eye	None expected during normal conditions of use. May cause eye irritation upon direct contact with the eyes.
Skin	None expected during normal conditions of use. Prolonged or frequent skin contact may cause an allergic reaction.
Inhalation	None expected during normal conditions of use. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
Ingestion	Health injuries are not known or expected under normal use.
Sensitization	The finished product is not expected to have chronic health effects.
Chronic effects	The finished product is not expected to have chronic health effects.
Carcinogenicity	The finished product is not expected to have chronic health effects.
Mutagenicity	The finished product is not expected to have chronic health effects.
Reproductive effects	The finished product is not expected to have chronic health effects.
Teratogenicity	The finished product is not expected to have chronic health effects.
Name of Toxicologically Synergistic Products	Not available

12. Ecological Information

Ecotoxicity	This product has not been tested.
Persistence / degradability	Not available
Bioaccumulation / accumulation	Not available
Mobility in environmental media	Not available
Environmental effects	Not available
Aquatic toxicity	Not available
Partition coefficient	Not available
Chemical fate information	Not available

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations. Container disposal: Empty containers may be included with domestic refuse for disposal to a landfill. This container may also be recycled in communities where aerosol container recycling is available. Before offering for recycling, empty the can or use the product according to the label instructions.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

U.S. Department of Transportation (DOT)

UN 1950, Aerosols, Class 2.1, Limited Quantity

Transportation of Dangerous Goods (TDG - Canada)

UN 1950, Aerosols, Class 2.1, Limited Quantity

IMDG (Marine Transport)

UN 1950, Aerosols, Class 2.1, Limited Quantity

IATA/ICAO (Air)

UN 1950, Aerosols, Flammable, Class 2.1

15. Regulatory Information

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
 Immediate Hazard - Yes
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - Yes
 Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Butane 106-97-8 Present

U.S. - Massachusetts - Right To Know List

Butane 106-97-8 Present

Ethane, 1,1-difluoro- 75-37-6 Present

Propane 74-98-6 Present

U.S. - Minnesota - Hazardous Substance List

Butane 106-97-8 Present

Propane 74-98-6 Simple asphyxiant

U.S. - New Jersey - Right to Know Hazardous Substance List

Butane 106-97-8 sn 0273

Ethane, 1,1-difluoro- 75-37-6 sn 0715

Propane 74-98-6 sn 1594

U.S. - Pennsylvania - RTK (Right to Know) List

Butane 106-97-8 Present

Propane 74-98-6 Present

U.S. - Rhode Island - Hazardous Substance List

Butane 106-97-8 Toxic; Flammable

Propane 74-98-6 Toxic; Flammable

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer

This product should only be used as directed on the label and for the purpose intended. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Further information

AIR WICK® 4-In-1 Air Freshener - Apple Cinnamon Medley, 8 oz - 0.188360v2.0
AIR WICK® 4-In-1 Air Freshener - Cool Linen & White Lilac, 8 oz - 0192143v2.0
AIR WICK® 4-In-1 Air Freshener - Fresh Waters, 8 oz - 0192143v2.0
AIR WICK® 4-In-1 Air Freshener - Lavender & Chamomile, 8 oz - 0121604v2.0
AIR WICK® 4-In-1 Air Freshener - Magnolia & Cherry Blossom, 8 oz - 0188398v2.0
AIR WICK® 4-In-1 Air Freshener - Papaya & Mango, 8 oz - 0188364v2.0
AIR WICK® 4-In-1 Air Freshener - Rain Garden, 8 oz - 0188387v2.0
AIR WICK® 4-In-1 Air Freshener - Sparkling Citrus, 8 oz - 0188375v2.0
AIR WICK® 4-In-1 Air Freshener - Vanilla Indulgence, 8 oz - 0188341v2.0
AIR WICK® Air Freshener - Serene Waters (National Parks - Glacier Bay), 8 oz - 0192143v2.0
AIR WICK® Air Freshener - Tropical Sunset (National Parks - Hawaii), 8 oz - 0.188364v2.0
AIR WICK® Air Freshener - Vanilla Sugar Cookies (Festive Moments), 8 oz - 0299270v2.0
AIR WICK® Air Freshener - Warm Apple Pie (Festive Moments), 8 oz - 0340663v1.0

Issue date

26-Sep-2012

Effective date

15-Sep-2012

Prepared by

Reckitt Benckiser Regulatory Department 800-333-3899

Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.



Alcare OR[®] Foamed Antiseptic Handrub

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 04/15/2015

Version: 1.0

SECTION 1: Identification

1.1. Product Identifier

Product Form: Mixture
Product Name: Alcare OR[®]
Foamed Antiseptic Handrub
Product Code: 6396

1.2. Intended Use of the Product

Use of the substance/mixture: Hand Sanitizer. For professional use only.

1.3. Name, Address, and Telephone of the Responsible Party

Company
STERIS Corporation
Official Mailing Address:
P.O. Box 147
St. Louis, MO 63166 USA

Street Address:
7501 Page Avenue
St. Louis, MO 63133 USA

Telephone Number for Information: 1-800-548-4873 (Customer Service-Healthcare Products)
web: www.steris.com
email: asksteris_msds@steris.com

1.4. Emergency Telephone Number

Emergency Number : 1-314-535-1395 or CHEMTREC: 1-800-424-9300

SECTION 2: Hazards Identification

2.1. Classification of the Substance or Mixture

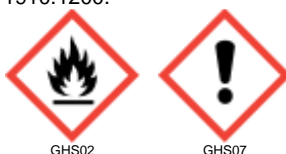
Classification (GHS-US)

Flam. Aerosol 2 H223, H229
Eye Irrit. 2A H319
Full text of H-phrases: see section 16

2.2. Label Elements – This label is regulated by the FDA and is exempt from GHS labeling.

FDA Product Labeling : This product is regulated by the FDA, therefore, the requirements for product labeling do not fall under the jurisdiction of the OSHA Hazard Communication Standard according to 29 CFR 1910.1200.

Hazard Pictograms (GHS-US) :



Signal Word (GHS-US) :

Warning

Hazard Statements (GHS-US) :

H223 - Flammable aerosol.
H229 - Pressurized containers; may burst if heated.
H319 - Causes serious eye irritation.

Precautionary Statements (GHS-US) :

P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking.
P251 - Pressurized container: Do not pierce or burn, even after use.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use appropriate media to extinguish.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 49 °C/120 °F.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Other Hazards: No additional information available

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: Composition/Information On Ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
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Alcare OR[®]

Foamed Antiseptic Handrub

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Ethyl alcohol	(CAS No) 64-17-5	30-60 (62% by volume)	Fam. Liq. 2, H225 Eye Irrit. 2A, H319
1,1-Difluoroethane	(CAS No) 75-37-6	1-5	Simple Asphy Fam. Gas 1, H220 Liquefied gas, H280
Isobutane	(CAS No) 75-28-5	1-5	Simple Asphy Fam. Gas 1, H220 Liquefied gas, H280

Full text of H-phrases: see section 16

SECTION 4: First Aid Measures

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid Measures After Skin Contact: Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do not induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Causes irritation.

Symptoms/Injuries After Inhalation: Not expected to be a primary route of exposure. May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: Not a primary skin irritant.

Symptoms/Injuries After Eye Contact: Direct spray will cause eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Suitable Extinguishing Media: Dry powder, alcohol-resistant foam, water in large amounts, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Highly flammable liquid and vapor. Extremely flammable aerosol.

Explosion Hazard: May form flammable/explosive vapor-air mixture.

Reactivity: Reacts with strong oxidants causing fire and explosion hazard.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Do not allow run-off from fire fighting to enter drains or water sources. Do not breathe fumes from fires or vapours from decomposition. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂).

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Use special care to avoid static electric charges. Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

Handle in accordance with good industrial hygiene and safety practice.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools.

6.4. Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

Alcare OR[®]

Foamed Antiseptic Handrub

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling And Storage

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable. Pressurized container: Do not pierce or burn, even after use.

Precautions for Safe Handling: Use only non-sparking tools. Keep away from heat, sparks, open flames, hot surfaces. – No smoking. Wear recommended personal protective equipment.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Not applicable

Storage Conditions: Store and use at 55-85°F (13-29°C), but not above 120°F (49°C). Close container after use. Store at normal room temperature for 24-48 hours following any prolonged exposure to the cold.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers.

Incompatible Materials: Heat sources.

7.3. Specific End Use(s) No additional information available

SECTION 8: Exposure Controls/Personal Protection

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Ethyl alcohol (64-17-5)		
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1900 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1900 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA IDLH	US IDLH (ppm)	3300 ppm (10% LEL)
Isobutane (75-28-5)		
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1900 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	800 ppm

8.2. Exposure Controls

Appropriate Engineering Controls : Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal Protective Equipment : Not applicable.

Materials for Protective Clothing : Not required under normal use conditions.

Hand Protection : Not applicable.

Eye Protection : Not applicable.

Skin and Body Protection : Wear suitable protective clothing.

Respiratory Protection : Normal room ventilation.

Consumer Exposure Controls : Do not eat, drink or smoke during use.

Other Information : When using, do not eat, drink or smoke.

SECTION 9: Physical And Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: White Foam (Aerosol)
Odor	: Mild alcohol odor
Odor Threshold	: No data available
pH	: No data available
Evaporation rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available

Alcare OR[®]

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Safety Data Sheet

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Solubility	: Completely soluble in water
Partition coefficient: n-octanol/water	: No data available
Viscosity	: No data available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

9.2. Other Information

No additional information available

SECTION 10: Stability And Reactivity

10.1 Reactivity:

Reacts with strong oxidants causing fire and explosion hazard.

10.2 Chemical Stability:

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3 Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

10.4 Conditions to Avoid:

Direct sunlight, extremely high or low temperatures, open flames, sources of ignition and incompatible materials. Do not freeze.

10.5 Incompatible Materials:

Strong acids. Strong bases. Strong oxidizers.

10.6 Hazardous Decomposition Products:

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological Information

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Alcare OR [®] Foamed Antiseptic Handrub	
LD50 Oral Rat	>5,000 mg/kg
Ethyl alcohol (64-17-5)	
LD50 Oral Rat	10470 mg/kg
LD50 Dermal Rat	20 ml/kg
LC50 Inhalation Rat	124.7 mg/l/4h
Isobutane (75-28-5)	
LC50 Inhalation Rat	658 mg/l/4h

Skin Corrosion/Irritation: Not a primary skin irritant.

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: No data available

Carcinogenicity: Not classified

Ethyl alcohol (64-17-5)	
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Not expected to be a primary route of exposure. May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: Repeated or prolonged skin contact may cause dermatitis and defatting.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

SECTION 12: Ecological Information

12.1. Toxicity

Ecology - General : Not classified.

Ethyl alcohol (64-17-5)	
LC50 Fish 1	12.0 - 16.0 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	9268 - 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

12.2. Persistence and Degradability

Alcare OR [®] Foamed Antiseptic Handrub	
Persistence and Degradability	Not established.

Alcare OR[®]

Foamed Antiseptic Handrub

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Ethyl alcohol (64-17-5)	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

Alcare OR[®]	
Foamed Antiseptic Handrub	
Bioaccumulative Potential	Not established.

Ethyl alcohol (64-17-5)	
Log Pow	-0.32
Bioaccumulative Potential	Not established.

Isobutane (75-28-5)	
BCF fish 1	1.57 - 1.97
Log Pow	2.88 (at 20 °C)

12.4. Mobility in Soil

No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable. Do not puncture or incinerate container.

SECTION 14: Transport Information

14.1 In Accordance with DOT

Proper Shipping Name : AEROSOLSflammable, (each not exceeding 1 L capacity)
 Hazard Class : 2.1
 Identification Number : UN1950
 Label Codes : 2.1
 LTD QTY
 ERG Number : 126



14.2 In Accordance with IMDG

Proper Shipping Name : AEROSOLS
 Hazard Class : 2
 Identification Number : UN1950
 Label Codes : 2.1
 LTD QTY
 EmS-No. (Fire) : F-D
 EmS-No. (Spillage) : S-U



14.3 In Accordance with IATA

Proper Shipping Name : AEROSOLS, FLAMMABLE
 Identification Number : UN1950
 Hazard Class : 2
 Label Codes : 2.1
 LTD QTY



ERG Code (IATA) : 10L
 Appropriate markings/labels not supplied on case – case requires full shipping name and flammable diamond.

14.4 In Accordance with TDG

Proper Shipping Name : AEROSOLSflammable, (each not exceeding 1 L capacity)
 Hazard Class : 2.1
 Identification Number : UN1950
 Label Codes : 2.1
 LTD QTY
 ERG Number : 126



SECTION 15: Regulatory Information

15.1 US Federal Regulations

Alcare OR[®]	
Foamed Antiseptic Handrub	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard

Ethyl alcohol (64-17-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

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1,1-Difluoroethane (75-37-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Isobutane (75-28-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2 US State Regulations

Ethyl alcohol (64-17-5)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

1,1-Difluoroethane (75-37-6)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List

Isobutane (75-28-5)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

15.3. Canadian Regulations

Not applicable.

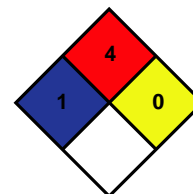
SECTION 16: Other Information, Including Date Of Preparation Or Last Revision

Revision date : 04/15/2015
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Aerosol 1	Flammable aerosol Category 1
Flam. Gas 1	Flammable gases Category 1
Flam. Liq. 2	Flammable liquids Category 2
Liquefied gas	Gases under pressure Liquefied gas
Simple Asphy	Simple Asphyxiant
Skin Irrit. 2	Skin corrosion/irritation Category 2
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H225	Highly flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H319	Causes serious eye irritation

NFPA Health Hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA Fire Hazard : 4 - Will rapidly or completely vaporize at normal atmospheric pressure and temperature, or is readily dispersed in air and will burn readily
NFPA Reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Party Responsible for the Preparation of This Document
STERIS Corporation

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS NA, GHS



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name ANTI-BACTERIAL FOAMING HAND SOAP (Green Link)
Product use Hands Soap.
Product code 1252
Date of issue 09/16/14 **Supersedes** 01/09/12

Emergency Telephone Numbers

For MSDS Information:
 Technical Services Group
 Telephone (780) 453-8100
 (Business Hours 8:00am - 5:00pm)

For Medical or Transportation Emergency
 CANUTEC (24 Hours)
 (613) 996-6666 - Call Collect

Prepared By
 Technical Services Group
 11627 178th Street
 Edmonton, Alberta T5S 1N6

Section 2. Hazards Identification

Emergency overview

Not expected to produce significant adverse health effects when the recommended instructions for use are followed.

No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin and clothing.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects **Routes of Entry** Eye contact.

Eyes May cause eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

Skin No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Ingestion No data on acute toxicity of the product when ingested.

Chronic effects No known chronic effects from exposure.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

<u>Name of Hazardous Ingredients</u>	<u>CAS number</u>	<u>% by Weight</u>
AMMONIUM LAURYL ETHER SULFATE; 2-(2-(2-(dodecyloxy)ethoxy)ethoxy)-; hydrogen sulfate; ammonium salt	32612-48-9	1 - 5
Ethanol; Ethyl Alcohol; SDA-40B	64-17-5	0.1 - 1

Section 4. First Aid Measures

Eye Contact Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical attention if irritation persists.

Skin Contact This product is formulated for use on the skin. Discontinue use if irritation and redness develop.

Inhalation Inhalation not likely under normal use conditions.

Ingestion Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. If affected person is conscious, give plenty of water to drink. Never give anything by mouth to an unconscious person. Call medical attendant, doctor, or poison control center immediately.

Section 5. Fire Fighting Measures

Flash Point	Not applicable.
Flammable Limits	Not applicable
Flammability	Non-combustible.
Auto-ignition Temperature	
Fire-Fighting Procedures	Use an extinguishing agent suitable for the surrounding fire.
Fire hazard	In a fire or if heated, a pressure increase will occur and the container may burst.
Products of Combustion	carbon oxides (CO, CO ₂)
Explosion hazard	

Section 6. Accidental Release Measures

Spill Clean up	Large spills are unlikely due to packaging. Absorb with an inert material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
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Section 7. Handling and Storage

Handling	Avoid contact with eyes. Do not ingest. Do not reuse product container.
Storage	Protect from freezing. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection**Product name** **Exposure limits**

No exposure limit value known.

Personal Protective Equipment (PPE)

Eyes	No special protection is required.
Hands and Body	No special protective clothing is required.
Respiratory	No respiratory protection needed under normal use conditions.

Section 9. Physical and Chemical Properties

Physical State	Liquid. [Clear. Thin liquid]	Color	Orange. [Light]
pH	5.5 to 6.5	Odor	Pleasant. Fragrance.
Boiling Point	100°C (212°F)	Vapor Pressure	Not available.
Specific Gravity	1.004	Vapor Density	Not available.
Solubility	Easily soluble in the following materials: cold water and hot water.	Evaporation Rate	1 (Water = 1)
Freezing Point		VOC (Consumer)	0 g/L

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	None known.
Hazardous Polymerization	Under normal conditions of storage and use, hazardous polymerization will not occur.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Carcinogenicity Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Acute Toxicity

Not available.

Section 12. Ecological Information**Aquatic Ecotoxicity**

Not available.

Section 13. Disposal Considerations**Waste Information**

Waste must be disposed of in accordance with applicable regulations. Consult your local or regional authorities for additional information.

Waste Stream Classification: Non-hazardous waste
Origin: RCRA waste.**Section 14. Transport Information****Regulatory information** **UN number** **Proper shipping name** **Classes** **PG*** **Label** **Additional information**

TDG Classification	Not regulated.					
IMDG Class	Not available.	Not available.	Not available.	-		

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information**Canada****WHMIS (Canada)**

Not controlled under WHMIS (Canada). Regulated under other Act

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

1. Identification

Product identifier **Base Demand Reagent (BDR)**
Product code R-0006
Recommended use Use as directed by manufacturer for purposes directly related to water testing.
Recommended restrictions None known

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Taylor Technologies, Inc.
Address 31 Loveton Circle
 Sparks, MD 21152
 United States

Telephone (410) 472-4340 Monday–Friday, 8:00 a.m.–4:30 p.m.
Website www.taylortechnologies.com
E-mail Not available
Emergency phone number (800) 837-8548

2. Hazard(s) identification

Physical hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.
Health hazards Eye damage/irritation Category 2A
Health hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.
Environmental hazards Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
Label elements



Signal word Warning
Hazard statement Causes serious eye irritation
Precautionary statement
 Prevention Wash skin thoroughly after handling. Wear eye protection/face protection.
 Response IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 Storage None required
 Disposal None required

Hazard(s) not otherwise classified None
Supplemental information None

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Deionized water	Dihydrogen oxide	7732-18-5	95–99
Sodium carbonate	Soda ash; Bisodium carbonate	497-19-8	0.1–5

4. First-aid measures

Inhalation	Move to fresh air. Give oxygen or artificial respiration if needed. Get medical attention immediately.
Skin contact	Immediately wash skin with soap and water. If symptoms persist or in all cases of concern, seek medical advice.
Eye contact	Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice.
Ingestion	Treat symptomatically. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If symptoms persist or in all cases of concern, seek medical advice.
Most important symptoms/effects, acute and delayed	Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching. Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. Firefighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Firefighting equipment/instructions	Firefighters should wear full protective gear. Evacuate the area promptly. Fight fire from upwind to avoid exposure to combustion products. Cool containers/tanks with water spray. Do not get water inside container. Move containers from fire area if it can be done without risk. Prevent fire-extinguishing water from contaminating surface water or the ground water system.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted
Hazardous combustion products	Carbon oxides. Sodium oxides. Other irritating fumes and smoke.

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewer, basements, or confined areas. Following product recovery, flush area with water. Small Spills: Absorb spillage with noncombustible, absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for reuse. For waste disposal, refer to section 13 of the SDS. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
Environmental precautions	Avoid discharge into drains, watercourses, or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in corrosive-resistant container with a corrosive-resistant inner liner. Store in original tightly closed container. Keep only in the original container. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (refer to section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

No occupational exposure limits noted for the ingredient(s)

Biological limit values

No biological exposure limits noted for the ingredient(s)

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield. Provide an emergency eyewash fountain and quick-drench shower in the immediate work area.

Skin protection

Hand protection

Wear appropriate chemical-resistant gloves. Advice should be sought from glove suppliers.

Other

Wear appropriate chemical-resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

Thermal hazards

When necessary, wear appropriate thermal protective clothing.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contamination.

9. Physical and chemical properties

Appearance

Physical state

Liquid

Form

Liquid

Color

Clear colorless or nearly colorless

Odor

Odorless

Odor threshold

Not available

pH

11.2

Melting point/freezing point

Not available

Initial boiling point and boiling range

212°F (100°C)

Flash point

Not applicable (does not burn)

Evaporation rate

Not available

Flammability (solid, gas)

Not applicable

Upper/lower flammability or explosive limits

Flammability limit, lower (%)

Not applicable

Flammability limit, upper (%)

Not applicable

Explosive limit, lower (%)

Not applicable

Explosive limit, upper (%)

Not applicable

Vapor pressure	17 mm Hg
Vapor density	0.6
Relative density	1.00 g/cm ³
Solubility(ies)	
Solubility (water)	Soluble in all proportions
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
Viscosity	Not available
Other information	
Explosive properties	Not applicable
Oxidizing properties	Not applicable
Percent volatile	99%
Specific gravity	1.00

10. Stability and reactivity

Reactivity	This product is stable and nonreactive under normal conditions of use, storage, and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use
Conditions to avoid	Contact with incompatible materials. Do not use in areas without adequate ventilation.
Incompatible materials	Aluminum. Ammonia. Fluorine. Lithium. Phosphorous pentoxide. Silver nitrate. Strong acids.
Hazardous decomposition products	None known. For hazardous combustion products, refer to section 5 of the SDS.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system
Skin contact	May cause slight or mild transient irritation
Eye contact	May cause serious eye irritation
Ingestion	May cause irritation, nausea, vomiting, and diarrhea

Most important symptoms/effects, acute and delayed
 Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching.

Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Acute toxicity
 This product is not classified as an acute toxicity hazard. See below for individual ingredient acute toxicity data.

Components	Species	Test Results
Sodium carbonate (CAS 497-19-8)		
Acute		
<i>Dermal</i>		
LD ₅₀	Rabbit	>2000 mg/kg
<i>Inhalation</i>		
LC ₅₀	Rat	2.3 mg/L, 4 hours (dust)
<i>Oral</i>		
LD ₅₀	Rat	2800 mg/kg

Deionized water (CAS 7732-18-5)

Acute

Dermal

LD₅₀

Rabbit

Not available

Inhalation

LC₅₀

Rat

Not available

Oral

LD₅₀

Rat

>89840 mg/kg

Skin corrosion/irritation

Causes skin irritation

Serious eye damage/eye irritation

Causes severe eye irritation

Respiratory sensitization

Not expected to be a respiratory sensitizer

Skin sensitization

Not expected to be a skin sensitizer

Germ cell mutagenicity

Not expected to be mutagenic

Carcinogenicity

This product is not considered to be a carcinogen by IARC, NTP, OSHA or U.S. ACGIH.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity, single exposure

Not classified as a specific target organ toxicity – single exposure

Specific target organ toxicity, repeated exposure

Not classified as a specific target organ toxicity – repeated exposure

Aspiration toxicity

Not expected to be an aspiration hazard

Chronic effects

Frequent or prolonged contact may dry the skin, leading to discomfort and dermatitis.

12. Ecological information

Ecotoxicity

This product is not classified as environmentally hazardous; however, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Sodium carbonate (CAS 497-19-8)		
Acute		
<i>Crustacea</i>		
EC ₅₀	Water flea (<i>Ceriodaphnia dubia</i>)	200 mg/L, 48 hours
<i>Fish</i>		
LC ₅₀	Western mosquitto fish (<i>Gambusia affinis</i>)	740 mg/L, 96 hours
Persistence and degradability	Not available	
Bioaccumulative potential	Not available	
Mobility in soil	Not available	
Other adverse effects	No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion with the user, the producer, and the waste disposal company.

Waste from residues/unused products

Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (refer to Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste-handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transportation information

DOT

Not regulated as dangerous goods

IATA

Not regulated as dangerous goods

IMDG

Not regulated as dangerous goods

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available

15. Regulatory information

U.S. federal regulations This product is known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory list.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

CERCLA Hazardous Substance (40 CFR 302.4)

Disodium phosphate (CAS 7558-79-4)

SARA 304 Emergency Release Notification

Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate hazard – yes
Delayed hazard – no
Fire hazard – no
Pressure hazard – no
Reactivity hazard – no

SARA 302 Extremely Hazardous Substance

Not regulated

SARA 311/312 Hazardous Chemical

Not regulated

SARA 313 (TRI reporting)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAP)

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

Safe Drinking Water Act (SDWA)

Not regulated

U.S. state regulations

California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not regulated

Massachusetts Right-to-Know Act

Not regulated

New Jersey Worker and Community Right-to-Know Act

Not regulated

Pennsylvania Worker and Community Right-to-Know Act

Not regulated

Rhode Island Right-to-Know Act

Not regulated

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International inventories

Country(ies) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	yes
Canada	Domestic Substances List (DSL)	yes
Canada	Non-Domestic Substances List (NDSL)	no
China	Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)	yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	yes
Europe	European List of Notified Chemical Substances (ELINCS)	no
Japan	Existing and New Chemical Substances (ENCS)	yes
Korea	Existing Chemicals List (ECL)	yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA)	yes

*A "yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(ies).

A "no" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(ies).

16. Other information, including date of preparation or last revision

List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists
AICS: Australian Inventory of Chemical Substances
CAA: Clean Air Act
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
CFR: Code of Federal Regulations
CSA: Canadian Standards Association
DEA: Drug Enforcement Agency
DOT: Department of Transportation
DSL: Domestic Substances List
EC: effective concentration
ECL: Existing Chemicals List
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
ENCS: Existing and New Chemical Substances
EPA: Environmental Protection Agency
HAP: hazardous air pollutants
HMIS: Hazardous Materials Identification System
HNOC: hazards not otherwise classified
HPA: Hazardous Products Act
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
ICAO: International Civil Aviation Organization
IECSC: Inventory of Existing Chemical Substances Produced or Imported in China
IMDG: International Maritime Dangerous Goods
IUCLID: International Uniform Chemical Information Database
LC: lethal concentration
LD: lethal dose
MARPOL: marine pollution
MSHA: Mine Safety and Health Administration
NDSL: Non-Domestic Substances List
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NOEC: no observable effect concentration
NTP: National Toxicology Program
NZIoC: New Zealand Inventory of Chemicals
OECD: Organisation for Economic Co-operation and Development
OEL: occupational exposure limits
OSHA: Occupational Safety and Health Administration
PEL: permissible exposure limits

PICCS: Philippine Inventory of Chemicals and Chemical Substances
PPE: personal protective equipment
RCRA: Resource Conservation and Recovery Act
RQ: reportable quantity
RTECS: Registry of Toxic Effects of Chemical Substances
RTK: right to know
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
SDWA: Safe Drinking Water Act
STEL: short-term exposure limit
TLV: threshold limit values
TSCA: Toxic Substances Control Act
TWA: time-weighted average
VOC: volatile organic compounds
WEL: workplace exposure limit

Disclaimer

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Issue date

May2015

Last revision

May2015

MATERIAL SAFETY DATA SHEET
KNOWLTON DEVELOPMENT CORPORATION



Tri Tech Laboratories
 1000 Robins Road
 Lynchburg, Va. 24504
 (434) 845-7073

LEK, Inc.
 315 Chemin
 Knowlton
 Knowlton, Quebec,
 Canada J0E 1V0
 (450) 242-2727

Body Blue
 2300 Drew Road
 Mississauga, Ontario,
 Canada L5S 1B8
 (905) 677-8333

DATE OF PREP: 8/06/2009 **LAST REVISED DATE:** 05/25/2010

SECTION I

PRODUCT CLASS: OTC
DISTRIBUTED BY: Bath & Body Works 7 Limited Parkway Reynoldsburg, OH 43068
EMERGENCY TELEPHONE # 3E COMPANY, a 24-hour emergency response communication service, can be reached as follows: CALL 3E COMPANY (24 hours) 1-800-451-8346 (Toll-free in the U.S. Virgin Islands) For calls originating elsewhere: 760-602-8703 (Collect calls are accepted)
TRADE NAME: BBW Anti-Bacterial Hand Gel - Relaunch All Fragrances

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	TLV		LEL	VAPOR PRESSURE
		PPM	MGM ³		
SD Alcohol 3C (68.832% w/w)					66.2 mm HG/40 °F
ETHYL ALCOHOL 190	60.69	1000	NA	NA	
Isopropyl Alcohol	3.17	400	NA	NA	

SECTION III - PHYSICAL DATA

BOILING RANGE: _____
VAPOR DENSITY: _____ HEAVIER _____ X _____ LIGHTER THAN AIR
EVAPORATION RATE: _____ FASTER _____ X _____ SLOWER THAN ETHER
PERCENT VOLATILE BY VOLUME: N/A
WEIGHT PER GALLON: APPROXIMATELY 7 LBS./GALLON

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: FLAMMABLE **FLASH POINT:** 80 °F Closed Cup
EXTINGUISHING MEDIA: N/A
UNUSUAL FIRE AND EXPLOSION HAZARDS: COMBUSTIBLE **LEL:** N/A
SPECIAL FIRE FIGHTING PROCEDURES: N/A

SECTION V - HEALTH HAZARD DATA

<p>THRESHOLD LIMIT VALUE: THE DATA INDICATES THAT THE PRODUCT IS CLASSIFIED AS RELATIVELY HARMLESS AND CAN BE FURTHER CLASSIFIED AS NON-TOXIC.</p>			
<p>EFFECTS OF OVER EXPOSURE:</p> <p>ACUTE: N/A CHRONIC: N/A</p>			
<p>ROUTES OF ENTRY: DERMAL <input checked="" type="checkbox"/> IN- HALATION <input type="checkbox"/> INGESTION <input type="checkbox"/></p>			
<p>EMERGENCY AND FIRST AID PROCEDURES</p> <p>INHALATION: N/A</p> <p>SKIN CONTACT: Flush with water.</p> <p>EYE CONTACT: Flush with water and contact health professional.</p> <p>INGESTION: Contact health professional.</p>			
<p>SECTION VI - REACTIVITY DATA</p>			
<p>STABILITY: UNSTABLE <input type="checkbox"/> X <input checked="" type="checkbox"/> STABLE <input type="checkbox"/></p>			
<p>INCOMPATIBILITY (Material To Avoid): None Known</p>			
<p>HAZARDOUS DECOMPOSITION PRODUCTS: None Known</p>			
<p>HAZARDOUS POLYMERIZATION: MAY OCCUR <input type="checkbox"/> X <input checked="" type="checkbox"/> WILL NOT OCCUR <input type="checkbox"/></p>			
<p>CONDITIONS TO AVOID:</p>			
<p>SECTION VII - SPILL OR LEAK PROCEDURES</p>			
<p>STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: RINSE TO DRAIN WITH PLENTY OF WATER</p>			
<p>WASTE DISPOSAL METHOD: USUAL & CUSTOMARY</p>			
<p>SECTION VIII - SPECIAL PROTECTION INFORMATION</p>			
<p>RESPIRATORY PROTECTION: NOT REQUIRED</p>			
<p>VENTILATION: N/A</p>			
<p>PROTECTIVE GLOVES: N/A</p>			
<p>EYE PROTECTION: Wear NIOSH approved safety glasses.</p>			
<p>OTHER PROTECTIVE EQUIPN/A</p>			
<p>SECTION IX - SPECIAL PRECAUTIONS</p>			
<p>PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: N/A</p>			
<p>OTHER PRECAUTIONS: N/A</p>			
<p>THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH BUT NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE.</p>			

MATERIAL SAFETY DATA SHEET
Essentially Similar to U.S. Department of Labor Form OSHA
Revised 07/11/2013
HMIS Health-1 Flammability-4 Physical Hazard-1 Personal Protection x

SECTION I-Product Information

Manufacturer: A.V.W. Inc.
24 Hour Emergency Phone Number: 800-424-9300
Product Name: Blow Off Air Duster

Synonym(s): Blow Off Air Duster

Blow Off Auto Duster 3.5oz

8oz

Blow Off 152a Duster 3.5oz

8oz

10oz

Trade Name: 152a
Chemical Name: Ethane, 1,1-Difluoro
FSPID: Front 152a
Model No: Blow Off 3.5 oz, Blow Off 8 oz, Blow Off 10oz.
CAS # Mixture
Product Use: Cleaning

SECTION II-Hazardous Identification

Emergency Overview DANGER
 Flammable gas. Contents under pressure. Containers may explode when heated.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation.

Eyes Contact with liquid may cause frostbite.

Skin Contact with liquid may cause frostbite.

Inhalation Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness). Vapors may cause dizziness or suffocation.

Ingestion Not a normal route of exposure.

Target organs Eyes. Skin. Respiratory system.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms Symptoms may include redness, dryness of the skin.

Odor, Color, Grade Clear, colorless with slight ethereal odor.

General Physical Form Gas

Immediate health, physical, and environmental hazards:

Closed containers exposed to heat from fire may build pressure and explode.

May cause frostbite. May cause target organ effects.

SECTION III-Composition on Ingredients

Component	CAS #	% by Wt	
1, 1-DIFLUOROETHANE	73-37-6		60-99%

SECTION IV-First Aid Measures

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices

are followed.

- Skin:** Flush with cool water.
Wash affected area with soap and water. If signs/symptoms persist, get medical attention.
- Eye contact:** Immediately flush with large amounts of cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.
- Inhalation:** If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.
- Ingestion:** Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

SECTION V-Firefighting Measures

Flammable Properties Flammable by WHMIS/OSHA criteria. Containers may explode when heated.

Autoignition temperature 849 °F

Flash Point: < 50 °F (Details: consumer aerosol does not exhibit a flame projection, therefore it is not determined to be flammable as defined in 16 CFR, Section 1500.3(c) (6) (viii).

Flammable Limits-LEL 3.9% volume

Flammable Limits-UEL 16.9% volume

Extinguishing media

Suitable extinguishing media

Small Fires: Dry chemical. Carbon dioxide. Water spray. Fog.

Unsuitable extinguishing media:

Not available

Protection of firefighters specific hazards arising

from the chemical Contents under pressure. Pressurized container may explode when exposed to heat or flame. Cool containers with flooding quantities of water until well after fire is out.

Protective equipment for firefighters

Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products

May include and are not limited to: Oxides of carbon. Fluoride gases.

Explosion data

Sensitivity to mechanical impact

Not available

Sensitivity to static discharge

Not available

SECTION VI-Accidental Release Measures

Accidental Release Measures

Refer to other sections of this MSDS for information regarding physical and health hazard, respiratory protection, ventilation, and personal protective equipment.
Evacuate unprotected and untrained personnel from hazard area.
The spill should be cleaned up by qualified personnel.
Remove all ignition sources such as flames, smoking materials, and electrical spark sources.
Use only non-sparking tools. Ventilate the area with fresh air. Close cylinder.
If the cylinder can't be closed, place in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors. Dispose of collected material as soon as possible.

Personal precautions keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

Methods for containment

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area).

Stop leak if you can do so without risk.
Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Before attempting clean up, refer to hazard data given above.
Remove sources of ignition.

Although the chance of a significant spill or leak is unlikely in aerosol containers, in the event of such an occurrence, absorb spilled material with a non-flammable absorbent such as sand or vermiculite.

SECTION VII-Handling and Storage

Handling: Do not eat, drink or smoke when using this product.
Wash exposed areas thoroughly with soap and water.
Contents may be under pressure, open carefully.
Keep away from heat, sparks, open flame, pilot lights and other sources of ignition.
No smoking while handling this material. Avoid eye contact with vapors, mists, or spray.
Avoid breathing mists or aerosols of this product.
Use good industrial hygiene practices in handling this material.

Storage: Keep out of reach of children.
Do not store at temperatures above 49°C (120.2°F).
Keep away from heat, open flames or other sources of ignition.
Store away from acids. Keep container in well-ventilated area.

SECTION VIII-Exposure Controls/Personal Protection

Engineering Controls: Do not use in a confined area or areas with little or no air movement.
Use general dilution ventilation and/or control mist, vapor, or spray.
If ventilation is not adequate, use respiratory protection equipment

Personal protective equipment

Respiratory protection: Do not breathe vapors.
Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations:
Half face piece or full face pressure demand self-contained breathing apparatus.

Hand protection: If there is constant skin contact, rubber gloves are recommended.

Eye/Face protection: Avoid eye contact with vapors, mists, or spray.
The following eye protection(s) are recommended: Safety Glasses with side shields.

Skin protection: Wear insulated gloves to protect against frostbite.

General hygiene considerations:

Handle in accordance with good industrial hygiene and safety practice.
When using do not eat or drink.
Wash hands and face before breaks and immediately after handling product.

SECTION IX-Physical and Chemical Properties

Form: Liquefied gas
Color: colorless
Odor: slight, ethereal
Odor threshold: Not available
Ph: Not available
Physical state: Gas
Melting point: Not available
Freezing point: Not available
Boiling point/
Boiling range: -25°C (-13.00 °F)

Flash point: -50°C (-58.00 °F)
Vapor Pressure: 599.43 kPa @25°C
Pour Point: Not available
Specific gravity: 0.91
Relative density: 0.9 g/cc @2°C
Vapour density: 2.4 @25°C
Flammability limits in air,
Lower, % by volume 3.9
Flammability limits in air,
upper, % by volume 16.9
Octanol.wate coefficient Not available
Solubility (H2O) Slightly
Auto-ignition temperature
 454 °C (849.20 °F)
Percent volatile: 100

SECTION X-Stability and Reactivity

Chemical stability: Stable under recommended storage conditions.
Conditions to avoid: Aerosol containers are unstable at temperatures above 49°C (120.2°F).
Incompatibility: Alkaline materials. Alkaline earth metals.
Hazardous decomposition
Products: May include and are not limited to: Oxides of carbon. Fluoride gases.
Possibility of hazardous reactions:
 Hazardous polymerization does not occur.

SECTION XI-Toxicological Information

Eye irritation Contact with liquid may cause frostbite.
Skin Contact with liquid may cause frostbite.
Inhalation Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
 Vapors may cause dizziness or suffocation.
Ingestion Not a normal route of exposure.
Sensitization Non-hazardous by WHMIS/OSHA criteria
Chronic effects Non-hazardous by WHMIS/OSHA criteria
Carcinogenicity Non-hazardous by WHMIS/OSHA criteria
Mutagenicity Non-hazardous by WHMIS/OSHA criteria
Reproductive effects Non-hazardous by WHMIS/OSHA criteria
Teratogenicity Non-hazardous by WHMIS/OSHA criteria
Synergistic Materials Not Available

SECTION X11-Ecological Information

Ecotoxicity Not available
Environmental effects Product contains no ozone depleting CFCs
Aquatic toxicity Not available
Persistence / degradability
 Not available
Bioaccumulation / accumulation
 Not available
Partition coefficient Not available
Mobility in environmental media
 Not available
Chemical fate information
 Not available
Other adverse effects Not available

SECTION X111-Disposal Considerations**Waste Code:** Not available**Disposal instructions** Review federal, state/provincial, and local government requirements prior to disposal.**Waste from residues/unused**

Not available

Contaminated packaging Not available**SECTION XIV – Transportation Information****U.S. Department of Transportation (DOT) International Maritime Organization (IMO)****Basic shipping requirements:**

1, 1-Difluoroethane

Transportation of Dangerous Goods (TDG – Canada)**Hazard class** 2.1**UN number** 1030**Additional Information:****DOT/IMO Label:** FLAMMABLE GAS**Special Information:** CARGO AIRCRAFT ONLY**IATA/CAO (Air)****Basic shipping requirements:****Proper shipping name:** 1, 1-Difluoroethane**Hazard class:** 2.1**UN number:** 1030**Additional information:****Maximum net quantity** Cargo aircraft only-150 kg maximum**Packaging** (Forbidden on passenger aircraft)**SECTION XV-Regulatory Information****Occupational Safety and Health Administration (OSHA)****29 CFR 1910.1200 hazardous**

Yes

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

Immediate Hazard	Yes
Delayed Hazard	No
Fire Hazard	Yes
Pressure Hazard	Yes
Reactivity Hazard	No

Section 302 extremely No**hazardous substances****Section 311 hazardous****chemical** Yes**Clean Air Act (CAA)** Not available**Clean Water Act (CWA)**

Not available

WHMIS status Controlled**WHMIS classification** Class A – Compressed Gas, Class B – Division 1 – Flammable Gas**State regulations** This product does not contain a chemical known to the State of California to cause cancer,

birth defects or other reproductive harm.

Inventory name**Country(s) or region****Inventory****Canada**

Domestic Substances List (DSL)

Canada

Non-Domestic Substances List (NDSL)

United States &**Puerto Rico**

Toxic Substances Control Act (TSCA) Inventory

SECTION XVI-Other Information**NFPA Hazard Classification****Health:**

1

Flammability:

4

Reactivity:

1

Physical hazard:

0

HMIS Hazard Classification**Health:**

1

Flammability:

4

Reactivity:

1


Protection:

X – See PPE section

SECTION 1: Identification

Product identifier	
Product name	Calcium Buffer
Product number	R-0010
Recommended use and restrictions	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
Manufacturer	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

SECTION 2: Hazard(s) identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Eye damage/irritation	Category 1
	Skin corrosion/irritation	Category 1A
Environmental hazards	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.	
Label elements		
Hazard pictograms		
Signal word	Danger	
Hazard statements	May be corrosive to metals. Causes severe skin burns and serious eye damage.	
Precautionary statements		
Prevention	Keep only in original container. Do not breathe dusts or mists. Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection if contact is likely to occur.	
Response	Absorb spillage to prevent material damage. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (OR HAIR): Immediately take off all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a physician or poison control center. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a physician or poison control center.	
Storage	Store in corrosive-resistant container with corrosive-resistant inner liner. Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store locked up.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Hazards not otherwise classified	Not applicable	

SECTION 3: Composition/information on ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	% w/w
Water	Dihydrogen oxide	7732-18-5	80-100
Sodium Hydroxide	Caustic Soda	1310-73-2	1-5

SECTION 4: First-aid measures

If inhaled

Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical attention if irritation develops. Chemical burns must be treated by a physician.

In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

If swallowed

Immediately call a physician or poison control center. Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs.

Most important symptoms and effects, both acute and delayed

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep person under observation. Symptoms may be delayed.

General information

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5: Firefighting measures**Extinguishing media**

Suitable extinguishing media	Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Specific hazards arising from the substance or mixture

Fire hazard	Not flammable
Explosion hazard	Not explosive
Reactivity	May be corrosive to metals
Hazardous combustion products	Sodium oxides. Other irritating fumes and smoke.

Advice for firefighters

Precautionary measures	Exercise caution when fighting any chemical fire; hazardous fumes will be present.
Firefighting equipment/instructions	Use water spray or fog for cooling exposed containers.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	Refer to section 9 of the SDS for flammability properties.

SECTION 6: Accidental release measures**Personal precautions, protective equipment, and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

Environmental precautions

Avoid discharge into drains, watercourses, or onto the ground.

Methods and material for containment and cleaning up

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Dilute base with water and neutralize with dilute acid. If not recoverable, dilute with water or flush to holding area and neutralize. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Reference to other sections

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

SECTION 7: Handling and storage**Personal precautions, protective equipment, and emergency procedures**

Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in corrosive-resistant container with corrosive-resistant inner liner. Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

SECTION 8: Exposure controls/personal protection**Occupational exposure limits****US ACGIH Threshold Limit Values**

<u>Components</u>	<u>Type</u>	<u>Value</u>
Sodium Hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m ³

US NIOSH: Pocket Guide to Chemical Hazards

<u>Components</u>	<u>Type</u>	<u>Value</u>
Sodium Hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m ³

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<u>Components</u>	<u>Type</u>	<u>Value</u>
Sodium Hydroxide (CAS 1310-73-2)	TWA	2 mg/m ³

Biological limit values

No biological exposure limits noted for the ingredient(s)

Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

Personal protective equipment

Eye/face protection Wear appropriate chemical safety goggles if contact is likely to occur.
 Skin protection Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
 Body protection Wear appropriate protective clothing if contact is likely to occur
 Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

SECTION 9: Physical and chemical properties**Information on basic physical and chemical properties**

Physical state	Liquid
Form	Liquid
Color	Clear, colorless or nearly colorless
Odor	Odorless
Odor threshold	No data available
pH	13.1
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available

Relative density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

SECTION 10: Stability and reactivity

Reactivity	May be corrosive to metals
Chemical stability	Stable under recommended handling and storage conditions (refer to section 7 of the SDS)
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use
Conditions to avoid	Contact with incompatible materials. Do not use in areas without adequate ventilation.
Incompatible materials	Acids, metals, and oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products under normal conditions

SECTION 11: Toxicological information

Information on toxicological effects

Likely routes of exposure are skin/eye contact and ingestion.

Most important symptoms/effects, acute and delayed

Direct skin contact may cause corrosive skin burns, deep ulcerations, and possibly permanent scarring.

Direct contact with concentrated solutions may be corrosive to the eyes and may cause severe damage, including blindness. Symptoms may include stinging, tearing, redness, swelling, and scarring.

Inhalation of mists can cause severe respiratory irritation. Symptoms may include coughing, choking, and wheezing. Inhalation could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed.

Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus, and possibly the digestive tract. Symptoms may include abdominal pain, vomiting, burns, perforations, and bleeding.

Acute toxicity

This product is not classified as an acute toxicity hazard. See below for product and individual ingredient acute toxicity data.

Product	Species	Acute Toxicity Estimate (ATE)
Calcium Buffer Reagent (CAS Mixture)		
Acute		
<i>Dermal</i>		
LD ₅₀	Rat	No data available
<i>Inhalation</i>		
LC ₅₀	Rat	No data available
<i>Oral</i>		
LD ₅₀	Rat	>2000 mg/kg
Components	Species	Acute Toxicity Data
Sodium hydroxide (CAS 1310-73-2)		
Acute		
<i>Dermal</i>		
LD ₅₀	Rat	No data available
<i>Inhalation</i>		
LC ₅₀	Rat	No data available
<i>Oral</i>		
LD ₅₀	Rat	140-340 mg/kg
Skin corrosion/irritation	Causes severe skin burns	
Serious eye damage/eye irritation	Causes serious eye damage	
Respiratory sensitization	No data available	

Skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Not classifiable

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

US National Toxicology Program (NTP) Report on Carcinogens

Not regulated

Reproductive toxicity No data available

Specific target organ toxicity (single exposure) No data available

Specific target organ toxicity (repeated exposure) No data available

Aspiration hazard No data available

SECTION 12: Ecological information

Ecotoxicity This product is not classified as environmentally hazardous.

Persistence and degradability No data available

Bioaccumulative potential No data available

Mobility in soil No data available

Other adverse effects Large or frequent spills can have a harmful or damaging effect on the environment.

SECTION 13: Disposal considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

DOT

UN number UN1824
UN Proper shipping name Sodium hydroxide solution
Reportable Quantity 5000 lbs
Class (Subsidiary risk) 8
Label(s) 8
Packing group III
Special provisions IB3, N34, T4, TP1
Packaging exceptions 154
Packaging, non-bulk 203

IATA

UN number UN1824
UN Proper shipping name Sodium hydroxide solution
Class (Subsidiary risk) 8
Packing group III
Special provisions A803

IMDG

UN number UN1824
UN Proper shipping name Sodium hydroxide solution
Class (Subsidiary risk) 8
Packing group III
Environmental hazards
Marine pollutant No
Special provisions 223

EmS

F-A, S-B

Special precautions for user

Read safety instructions, SDS, and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

This substance/mixture is not intended to be transported in bulk.

DOT hazard pictograms



IATA; IMDG hazard pictograms



SECTION 15: Regulatory information

US federal regulations

CERCLA Hazardous Substance (40 CFR 302.4)

<u>Chemical name</u>	<u>CAS number</u>	<u>Reportable Quantity</u>
Sodium Hydroxide	1310-73-2	1000 lbs

SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

SARA 304 Emergency Release Notification

Not regulated

SARA 311/312 Hazardous Chemical

<u>Chemical name</u>	<u>CAS number</u>
Sodium hydroxide	1310-73-2

SARA 313 (TRI reporting)

Not regulated

TSCA Section 8(b) Chemical Inventory

All components are on the U.S. EPA TSCA Inventory list.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)

Not regulated

Safe Drinking Water Act (SDWA)

Not regulated

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

Not regulated

Massachusetts Right-to-Know Act

Not regulated

New Jersey Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Sodium hydroxide	1310-73-2

Pennsylvania Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
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Sodium hydroxide	1310-73-2
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Rhode Island Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
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Sodium hydroxide	1310-73-2
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SECTION 16: Other information

NFPA Rating

Health hazard	2
Fire hazard	0
Reactivity	1
Specific	N/A

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Issue date:

May 2015


Last revisions

April 2018

SECTION 1: Identification

Product identifier	
Product name	Calcium Indicator Liquid
Product number	R-0011L
Recommended use and restrictions	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
Manufacturer	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

SECTION 2: Hazard(s) identification

Physical hazards	Flammable liquids	Category 2
Health hazards	Eye damage/irritation	Category 2A
	Specific target organ toxicity, single exposure	Category 3
Environmental hazards	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.	
Label elements		
Hazard pictograms		
Signal word	Danger	
Hazard statements	Highly flammable liquid and vapor. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.	
Precautionary statements		
Prevention	Keep away from heat/ sparks/ open flames/ hot surfaces. - No smoking. Keep container tightly closed. Ground/ Bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/ eye protection/ face protection if contact is likely to occur. Wash skin thoroughly after handling. Avoid breathing dust/fumes/gas/mists/vapors/spray. Use only outdoors or in a well-ventilated area.	
Response	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a physician or poison center if you feel unwell. IF ON SKIN (OR HAIR): Immediately take off all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. IF EYE IRRITATION PERSISTS: Get medical advice/attention. IN CASE OF FIRE: Use alcohol-resistant foam, carbon dioxide, dry chemical powder, or water fog to extinguish.	
Storage	Store in well-ventilated place. Keep tightly capped. Store out of direct sunlight between 36°F-85°F.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Hazards not otherwise classified	Not applicable	

SECTION 3: Composition/information on ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	% w/w
Triethanolamine	Trolamine, 2,2', 2'' -Nitrilotriethanol	102-71-6	60-80
Isopropyl alcohol	Isopropanol	67-63-0	10-30
Nonhazardous and other	Not applicable	Not applicable	0.1-1

components below reportable levels

SECTION 4: First-aid measures

If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

If swallowed

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice/attention.

Most important symptoms and effects, both acute and delayed

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media	Alcohol-resistant foam, carbon dioxide, dry chemical powder, or water fog.
Unsuitable extinguishing media	Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Specific hazards arising from the substance or mixture

Fire hazard	Flammable liquid and vapor. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can be electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential static discharge, use proper bonding and grounding procedures. This material may be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment). Vapors are heavier than air and may spread along floors.
Explosion hazard	Vapors may form explosive mixtures with air. This material may be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment). Vapors are heavier than air and may spread along floors.
Reactivity	Hazardous reactions will not occur under normal conditions.
Hazardous combustion products	Carbon oxides, nitrogen oxides. Other irritating fumes and smoke.

Advice for firefighters

Precautionary measures	Exercise caution when fighting any chemical fire; hazardous fumes will be present.
Firefighting equipment/instructions	Use water spray or fog for cooling exposed containers.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	Refer to section 9 of the SDS for flammability properties.

SECTION 6: Accidental release measures

Personal precautions, protective equipment, and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe dust/ fumes/ gas/ mists/ vapors/ spray. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

Environmental precautions

Avoid discharge into drains, watercourses, or onto the ground.

Methods and material for containment and cleaning up

Ventilate the contaminated area. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area

with water to remove residual contamination. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Reference to other sections

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

SECTION 7: Handling and storage

Personal precautions, protective equipment, and emergency procedures

Do not handle until all safety precautions have been read and understood. Do not breathe dust/fumes/gas/mists/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

Conditions for safe storage, including any incompatibilities

Store in well-ventilated place. Keep cool. Keep tightly capped. Store out of direct sunlight between 36°F-85°F. Store away from incompatible materials (refer to section 10 of the SDS).

SECTION 8: Exposure controls/personal protection

Occupational exposure limits

US ACGIH Threshold Limit Values

Components	Type	Value
Isopropanol (CAS 67-63-0)	STEL	980 mg/m ³
Isopropanol (CAS 67-63-0)	TWA	492 mg/m ³
Triethanolamine (CAS 102-71-6)	TWA	5 mg/m ³

US NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Isopropanol (CAS 67-63-0)	ST	1225 mg/m ³
Isopropanol (CAS 67-63-0)	TWA	980 mg/m ³
Isopropanol (CAS 67-63-0)	IDLH	4920 mg/m ³

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Isopropanol (CAS 67-63-0)	PEL	980 mg/m ³

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Isopropanol (CAS 67-63-0)	40 mg/L	Acetone	Urine	End of shift at end of workweek

Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

Personal protective equipment

Eye/face protection	Wear appropriate chemical safety goggles if contact is likely to occur.
Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
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Form	Liquid
Color	Dark purple to dark blue
Odor	Alcohol
Odor threshold	90 mg/m ³
pH	No data available
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	180.4°F (82.3°C)
Flash point	53°F (12°C) Closed cup
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Flammable
Upper Flammability Limit	UEL 12% v/v 200° F (93°C)
Lower Flammability Limit	LEL 2% v/v 200° F (93°C)
Vapor pressure	45.4 mmHG at 25°C
Vapor density	2.1
Relative density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	Moderately explosive when exposed to heat or flame.
Oxidizing properties	No data available

SECTION 10: Stability and reactivity

Reactivity	Hazardous reactions will not occur under normal conditions.
Chemical stability	Stable under recommended handling and storage conditions (refer to section 7 of the SDS.)
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat, sparks, open flames, and other ignition sources. Temperatures exceeding the flash point. Direct sunlight. Contact with incompatible materials. Do not use in areas without adequate ventilation.
Incompatible materials	Acetaldehyde, acids, chlorine, ethylene oxide, halogenated hydrocarbons, isocyanates, nitrites, organics, strong acids, strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products under normal conditions.

SECTION 11: Toxicological information

Information on toxicological effects

Likely routes of exposure are skin/eye contact and ingestion.

Most important symptoms/effects, acute and delayed	Direct skin contact may cause irritation. Symptoms may include redness and itching. Direct eye contact may cause serious irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Inhalation of mists can cause respiratory irritation, drowsiness, dizziness. Symptoms may include coughing and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.
Acute toxicity	This product is not classified as an acute toxicity hazard.
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	Causes serious eye irritation
Respiratory sensitization	No data available
Skin sensitization	No data available
Germ cell mutagenicity	No data available

Carcinogenicity**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not classifiable

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

US National Toxicology Program (NTP) Report on Carcinogens

Not regulated

Reproductive toxicity	No data available
Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness. May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	No data available
Aspiration hazard	No data available

SECTION 12: Ecological information

Ecotoxicity	This product is not classified as environmentally hazardous.
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Other adverse effects	Large or frequent spills can have a harmful or damaging effect on the environment.

SECTION 13: Disposal considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information**DOT**

UN number	1219
UN Proper shipping name	Isopropyl alcohol solution
Reportable Quantity	None
Class (Subsidiary risk)	3
Label(s)	3
Packing group	II
Special provisions	IB2, T4, TP1
Packaging exceptions	4b, 150
Packaging, non-bulk	202

IATA

UN number	1219
UN Proper shipping name	Isopropyl alcohol solution
Class (Subsidiary risk)	3
Packing group	II
Special provisions	A180

IMDG

UN number	1219
UN Proper shipping name	Isopropyl alcohol solution
Class (Subsidiary risk)	3
Packing group	II
Environmental hazards	
Marine pollutant	No
Special provisions	None
EmS	F-E, S-D
Special precautions for user	Read safety instructions, SDS, and emergency procedures before handling.

DOT hazard pictograms



IATA; IMDG hazard pictograms



SECTION 15: Regulatory information

US federal regulations

CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

SARA 304 Emergency Release Notification

Not regulated

SARA 311/312 Hazardous Chemical

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0
Triethanolamine	102-71-6

SARA 313 (TRI reporting)

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0

TSCA Section 8(b) Chemical Inventory

All components are on the U.S. EPA TSCA Inventory list.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)

Not regulated

Safe Drinking Water Act (SDWA)

Not regulated

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

Not regulated

Massachusetts Right-to-Know Act

Not regulated

New Jersey Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0
Triethanolamine	102-71-6

Pennsylvania Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0
Triethanolamine	102-71-6

Rhode Island Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Isopropanol	67-63-0
Triethanolamine	102-71-6

SECTION 16: Other information**NFPA Rating**

Health hazard	1
Fire hazard	3
Reactivity	1
Specific	N/A

Disclaimer

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Issue date:

May 2015

Last revisions

April 2018



**Arch
Chemicals,
Inc.**

**MATERIAL SAFETY
DATA SHEET**

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:	1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

**PRODUCT NAME: CCH® COMMERCIAL DRY CHLORINATOR
TABLETS**

EPA Registration Number: 1258-1217

1. PRODUCT AND COMPANY IDENTIFICATION

Arch Chemicals, Inc. 501 Merritt 7 PO Box 5204 Norwalk, CT 06856-5204	REVISION DATE:	03/24/2008
	SUPERCEDES:	03/19/2008
	MSDS Number:	000000005438
	SYNONYMS:	None
	CHEMICAL FAMILY:	Hypochlorite
	DESCRIPTION / USE:	Sanitizer and Oxidizer
	FORMULA:	None established

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	Toxic by inhalation, Corrosive to eyes and skin, Lung toxin, Oxidizer
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Routes of Entry:	Inhalation, skin, eyes, ingestion
Chemical Interactions:	No known or reported interactions.
Medical Conditions Aggravated:	Asthma, respiratory and cardiovascular disease

Human Threshold Response Data

Odor Threshold	Approximately 1.4 mg/m3 (based on odor threshold of chlorine)
Irritation Threshold	Approximately 13-22 mg/m3 (based on irritation threshold of chlorine)

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	3	0	1	
NFPA	3	0	1	OX



Immediate (Acute) Health Effects

Inhalation Toxicity:	HARMFUL IF PRODUCT IS INHALED IN HIGH CONCENTRATIONS. CAUSES BURNS TO RESPIRATORY TRACT. Inhalation of dust or vapor from this product can be irritating to the nose, mouth, throat and lungs. In confined areas, mechanical agitation can result in high levels of dust, and reaction with incompatible materials (as listed in Section 10) can result in high concentrations of chlorine vapor, either of which may result in burns to the respiratory tract, producing lung edema, shortness of breath, wheezing, choking, chest pains, impairment of lung function and possible permanent lung damage.
Skin Toxicity:	DRY MATERIAL CAUSES MODERATE SKIN IRRITATION. WET MATERIAL CAUSES SKIN BURNS. Dermal exposure to dry material causes moderate skin irritation characterized by redness and swelling. Dermal exposure to wet material can cause severe irritation and/or burns characterized by redness, swelling and scab formation. Prolonged skin exposure may cause permanent damage.
Eye Toxicity:	CAUSES BURNS TO EYES. Severe irritation and/or burns can occur following eye exposure. Direct contact may cause impairment of vision and corneal damage.
Ingestion Toxicity:	MODERATELY TOXIC IF SWALLOWED. CAUSES BURNS TO DIGESTIVE TRACT. Irritation and/or burns can occur to the entire gastrointestinal tract, including the stomach and intestines, characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding, and/or tissue ulceration or perforation. Significant exposure to this material can lead to serious health effects and/or death.
Acute Target Organ Toxicity:	This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract., The dry material is irritating to the skin. However when wet, it will produce burns to the skin.

Prolonged (Chronic) Health Effects

Carcinogenicity:	This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.
Reproductive and Developmental Toxicity:	No reproductive or developmental risk to humans is expected from exposure to this product.
Inhalation:	Repeated inhalation exposure may cause impairment of lung function and permanent lung damage.
Skin Contact:	Effects similar to those from acute exposure. In addition, chronic exposure to wet material may cause effects secondary to tissue destruction.
Ingestion:	There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure. The acute corrosivity of this product, makes chronic ingestion of significant amounts unlikely.
Sensitization:	This material is not known or reported to be a skin or respiratory sensitizer.
Chronic Target Organ Toxicity:	There are no known or reported effects from repeated exposure except those secondary to burns.
Supplemental Health Hazard Information :	No additional health information available.



3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
CALCIUM HYPOCHLORITE	7778-54-3	60 - 80
SODIUM CHLORIDE	7647-14-5	10 - 20
CALCIUM CHLORATE	10137-74-3	0 - 5
CALCIUM CHLORIDE	10043-52-4	0 - 5
CALCIUM HYDROXIDE	1305-62-0	0 - 6
CALCIUM CARBONATE	471-34-1	0 - 5
Water	7732-18-5	5.5 - 10

4. FIRST AID MEASURES

General Advice:	Call a poison control center or doctor for treatment advice. For 24-hour emergency medical assistance, call Arch Chemical Emergency Action Network at 1-800-654-6911. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
Inhalation:	IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Skin Contact:	IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Eye Contact:	IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Ingestion:	IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Notes to Physician:	Probable mucosal damage may contraindicate the use of gastric lavage.



5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA): This product is chemically reactive with many substances. Any contamination of the product with other substances by spill or otherwise may result in a chemical reaction and fire., This product is a strong oxidizer which is capable of intensifying a fire once started., Product is not known to be flammable, combustible or pyrophoric.

Flammable Properties

Flash Point: Not applicable
Autoignition Temperature: Not applicable
Extinguishing Media: Water only. Do not use dry extinguishers containing ammonium compounds.
Fire Fighting Instructions: Use water to cool containers exposed to fire. See Section 6 for protective equipment for fire fighting.
Upper Flammable / Explosive Limit, % in air: Not applicable
Lower Flammable / Explosive Limit, % in air: Not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Response to a large quantity spill (100 pounds or greater) or when dusting or decomposition gas exposure could occur requires the use of a positive pressure full face supplied air respirator or self contained breathing apparatus (SCBA), chemical resistant gloves, coveralls and boots. In case of fire, this personal protective equipment should be used in addition to normal fire fighter equipment.

Spill Mitigation Procedures

Air Release: Vapors may be suppressed by the use of water fog. All water utilized to assist in fume suppression, decontamination or fire suppression may be contaminated and must be contained before disposal and/or treatment.

Water Release: This product is heavier than water. This material is soluble in water. Monitor all exit water for available chlorine and pH. Advise local authorities of any contaminated water release.

Land Release: Contact 1-800-654-6911 immediately. DANGER: All spills of this product should be treated as contaminated. Contaminated product may initiate a chemical reaction that may spontaneously ignite any combustible material present, resulting in a fire of great intensity. In case of a spill, separate all spilled product from packaging, debris and other material. Using a clean broom or shovel, place all spilled product into plastic bags, and place those bags into a clean, dry disposal container, properly marked and labeled. Disposal containers made of plastic or metal are recommended. Do not seal disposal containers tightly. Immediately remove all product in disposal containers to an isolated area outdoors. Place all damaged packaging material in a disposal container of water to assure decontamination (i.e. removal of all product) before disposal. Place all undamaged packaging in a clean, dry container properly marked and labeled. Call for disposal procedures.



Additional Spill Information : Hazardous concentrations in air may be found in local spill area and immediately downwind. Remove all sources of ignition. Stop source of spill as soon as possible and notify appropriate personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration. This material may be neutralized for disposal; you are requested to contact Arch Chemicals at 1-800-654-6911 before beginning any such procedure. FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC: 1-800-424-9300 REPORTABLE QUANTITY: 10 lbs. (as calcium hypochlorite) per 40 CFR 302.4.

7. HANDLING AND STORAGE

Handling: Avoid inhalation of dust and fumes. Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Remove contaminated clothing and wash before reuse.

Storage: Keep product tightly sealed in original containers. Store product in a cool, dry, well-ventilated area. Store away from combustible or flammable products. Keep product packaging clean and free of all contamination, including, e.g. other pool treatment products, acids, organic materials, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, all corrosive liquids, flammable or combustible materials, etc.

Shelf Life Limitations: Do not store product where the average daily temperature exceeds 95° F. Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products. Shelf life (that is, the period of time before the product goes below stated label strength) is determined by storage time and temperatures. Store in a cool, dry and well ventilated area. Prolonged storage at elevated temperatures will significantly shorten the shelf life. Storage in a climate controlled storage area or building is recommended in those areas where extremes of high temperature occur.

Incompatible Materials for Storage: Do not allow product to come in contact with other materials, including e.g. other pool treatment products, acids, organic materials, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, all corrosive liquids, flammable or combustible materials, etc. A chemical reaction with such substances can cause a fire of great intensity.

Do Not Store At temperatures Above: Average daily temperature of 35° C / 95° F. Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.



Protective Equipment for Routine Use of Product

Respiratory Protection : Wear a NIOSH approved respirator if levels above the exposure limits are possible.

Respirator Type : A NIOSH approved full-face air purifying respirator equipped with combination chlorine/P100 cartridges. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.

Skin Protection : Wear impervious gloves to avoid skin contact. A full impervious suit is recommended if exposure is possible to a large portion of the body. A safety shower should be provided in the immediate work area.

Eye Protection: Use chemical goggles. Emergency eyewash should be provided in the immediate work area.

Protective Clothing Type: Neoprene, Nitrile, Natural rubber (This includes: gloves, boots, apron, protective suit)

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
CALCIUM HYPOCHLORITE	7778-54-3	ARCH-ROEG*	1 mg/m3 TWA
CALCIUM HYPOCHLORITE	7778-54-3	NIOSH-IDLH	37 - 48 mg/m3 based on IDLH concentration of chlorine
CALCIUM HYDROXIDE	1305-62-0	ZUS_ACGIH	5 mg/m3 TWA
CALCIUM HYDROXIDE	1305-62-0	ZUS_OSHAPO	5 mg/m3 TWA
CALCIUM HYDROXIDE	1305-62-0	ZUS_OSHAP1	15 mg/m3 TWA Total dust
CALCIUM HYDROXIDE	1305-62-0	ZUS_OSHAP1	5 mg/m3 TWA respirable dust fraction
CALCIUM CARBONATE	471-34-1	ZUS_ACGIH	10 mg/m3 TWA
CALCIUM CARBONATE	471-34-1	ZUS_OSHAP1	15 mg/m3 TWA Total dust
CALCIUM CARBONATE	471-34-1	ZUS_OSHAP1	5 mg/m3 TWA respirable dust fraction

*ARCH-ROEG: Arch Recommended Occupational Exposure Guideline.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: solid
 Form: Tablet
 Color: white
 Odor: Chlorine-like
 Molecular Weight: (Active ingredient)143.00
 Specific Gravity : Not applicable
 pH : 10.4 - 10.8 (1% solution in neutral, distilled water) (@ 25 Deg. C)
 Boiling Point: Not applicable
 Freezing Point: Not applicable
 Melting Point: Not applicable



Density: 1.9g/cc
Vapor Pressure: (@ 25 Deg. C) Not applicable
Vapor Density: Not applicable
Viscosity: Not applicable
Fat Solubility: No data
Solubility in Water: 18 % Product also contains calcium hydroxide and calcium carbonate which will leave a residue.

Partition coefficient n-octanol/water: Not applicable
Evaporation Rate: Not applicable
Oxidizing: Oxidizer
Volatiles, % by vol.: Not applicable
VOC Content: Not applicable
HAP Content: Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary: Product is not sensitive to mechanical shock or impact. Product is not sensitive to electrical static discharge. Product will not undergo hazardous polymerization. Product is an NFPA Class 3 oxidizer which can cause a severe increase in fire intensity. Not pyrophoric. Not an organic peroxide. If subjected to excessive temperatures, the product may undergo rapid decomposition, evolution of chlorine gas, and heat sufficient to ignite combustible substances. If product is exposed to small amounts of water, it can react violently to produce heat and toxic gases and spatter. Use copious amounts of water for fires involving this product.

Conditions to Avoid: Do not store next to heat source, in direct sunlight, or elevated storage temperature. Do not store where the daily average temperature exceeds 95 °F. Prevent ingress of humidity and moisture into container or package. Always close the lid.

Chemical Incompatibility: This product is chemically reactive with many substances, including, e.g., other pool treatment products, acids, organics, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, corrosive, flammable or combustible materials. Do not allow product to contact any foreign matter, including other water treatment products. Contamination or improper use may cause a fire of great intensity, explosion or the release of toxic gases. If product is exposed to small amounts of water, it can react violently to produce heat and toxic gases and spatter.

Hazardous Decomposition Products: Chlorine
Decomposition Temperature: 170 - 180 DEG°C - , 338 - 356 DEG°F-

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

CALCIUM HYPOCHLORITE LD50 (65% calcium hypochlorite) 850 mg/kg Rat

CCH® COMMERCIAL DRY CHLORINATOR TABLETS

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SODIUM CHLORIDE	LD50 = 3,000 mg/kg	Rat
CALCIUM CHLORIDE	LD50 = 1,000 mg/kg	Rat
CALCIUM HYDROXIDE	LD50 = 7,340 mg/kg	Rat

Dermal LD50 value:

CALCIUM HYPOCHLORITE	LD50 (65% calcium hypochlorite)	> 2,000 mg/kg	Rabbit
SODIUM CHLORIDE	LD50	> 10,000 mg/kg	Rabbit
CALCIUM CHLORIDE	LD50	= 2,630 mg/kg	Rat
CALCIUM HYDROXIDE		No data	

Inhalation LC50 value:

CALCIUM HYPOCHLORITE	Inhalation LC50 1 h (65% calcium hypochlorite), (Nose Only)	= 2.04 MG/L	Rat
CALCIUM HYPOCHLORITE	Inhalation LC50 4 h (65% calcium hypochlorite), (Nose Only)	= 0.51 MG/L	Rat
SODIUM CHLORIDE	Inhalation LC50 1 h	> 42 MG/L	Rat
CALCIUM CHLORIDE		No data	
CALCIUM HYDROXIDE		No data	

Product Animal Toxicity

<u>Oral LD50 value:</u>	LD50	Approximately 800 mg/kg	Rat
<u>Dermal LD50 value:</u>	LD50	> 2,000 mg/kg	Rabbit
<u>Inhalation LC50 value:</u>	Inhalation LC50 1.00 h (Nose Only)	Believed to be > 2.04 MG/L	Rat
	Inhalation LC50 4 h (Nose Only)	Believed to be > 0.51 MG/L	Rat
Skin Irritation:	DRY MATERIAL CAUSES MODERATE SKIN IRRITATION., WET MATERIAL CAUSES SKIN BURNS.		
Eye Irritation:	Corrosive to eyes.		
Skin Sensitization:	This material is not known or reported to be a skin or respiratory sensitizer.		
Acute Toxicity:	This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract. The dry material is irritating to the skin. However when wet, it will produce burns to the skin.		
Subchronic / Chronic Toxicity:	There are no known or reported effects from repeated exposure except those secondary to burns.		
Reproductive and Developmental Toxicity:	Calcium hypochlorite has been tested for teratogenicity in laboratory animals. Results of this study have shown that calcium hypochlorite is not a teratogen.		

CALCIUM CHLORIDE	Not known or reported to cause reproductive or developmental toxicity.
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Mutagenicity:	Calcium hypochlorite has been tested in the Dominant lethal assay in male mice, and it did not induce a dominant lethal response. Calcium hypochlorite has been reported to produce mutagenic activity in two in vitro assays. It has, however, been shown to lack the capability to produce mutations in animals based on results from the micronucleus assay. In vitro assays frequently are inappropriate to judge the mutagenic potential of bactericidal chemicals due to a high degree of cellular toxicity. The concentration which produces mutations in these in vitro assays is significantly greater than the concentrations used for disinfection. Based on high cellular toxicity in in vitro assays and the lack of mutagenicity in animals, the risk of genetic damage to humans is judged not significant.
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CALCIUM CHLORIDE	This product was determined to be non-mutagenic in the Ames assay. It was also shown to be non-
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clastogenic in the chromosomal aberration test.

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. One hundred mice were exposed dermally 3 times a week for 18 months to a solution of calcium hypochlorite. Histopathological examination failed to show an increased incidence of tumors. IARC (International Agency for Research on Cancer) reviewed studies conducted with several hypochlorite salts. IARC has classified hypochlorite salts as having inadequate evidence for carcinogenicity to humans and animals. IARC therefore considers hypochlorite salts to be not classifiable as to their carcinogenicity to humans (Group 3 Substance).

CALCIUM CHLORIDE This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

12. ECOLOGICAL INFORMATION

Overview: Highly toxic to fish and other aquatic organisms.

Ecological Toxicity Values for: CALCIUM HYPOCHLORITE

Bluegill	-	(nominal, static). 96 h LC50 0.088 mg/l
Rainbow trout (<i>Salmo gairdneri</i>),	-	(nominal, static). 96 h LC50 0.16 mg/l
Daphnia magna,	-	(nominal, static). 48 h LC50 0.11 mg/l
Bobwhite quail	-	Dietary LC50 > 5,000 ppm
Mallard ducklings	-	Dietary LC50 > 5,000 ppm
Bobwhite quail	-	Oral LD50 3,474 mg/kg

Ecological Toxicity Values for: CALCIUM CHLORIDE

Bluegill	-	(nominal, static). 96 h LC50 = 10,650 mg/l
Mosquito fish	-	(nominal, static). 96 h LC50 = 13,400 mg/l
Fathead minnow (<i>Pimephales promelas</i>),	-	(nominal, static). 96 h LC50 = 4,630 mg/l
Daphnia magna,	-	(nominal, static). 48 h LC50= 2,770 mg/l
Ceriodaphnia dubia	-	(nominal, static). 48 h LC50= 1,830 mg/l
Nitzschia linearis (diatom)	-	(nominal, static). 5 day LC50 = 3,130 mg/l

13. DISPOSAL CONSIDERATIONS

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

Waste Disposal Summary : If this product becomes a waste, it meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following



EPA hazardous waste number: D001. If this product becomes a waste, it will be a hazardous waste which is subject to the Land Disposal restrictions under 40 CFR 268 and must be managed accordingly.

Disposal Methods : As a hazardous solid waste it should be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : D001

14. TRANSPORT INFORMATION

Land (US DOT): UN2880 CALCIUM HYPOCHLORITE, HYDRATED MIXTURE 5.1 III
Water (IMDG): UN2880 CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, 5.1 III

Flash Point: Not applicable
Air (IATA): UN2880 CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, 5.1 III
Emergency Response Guide Number: ERG # 140

Transportation Notes: Under specific circumstances, this product can ship under two transport exceptions, Limited Quantity or Consumer Commodity. See Bill of Lading for proper shipping description.

EMS: F-H, S-Q

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

EPA Pesticide Registration Number: 1258-1217

FIFRA Listing of Pesticide Chemicals (40 CFR 180): This product is regulated under the Federal Insecticide, Fungicide and Rodenticide Act. It must be used for purposes consistent with its labeling.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):
Health Immediate (Acute) Health Hazard
Physical Fire Hazard

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

ZUS_SAR302 TPQ (threshold planning quantity) None established

Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA Reportable quantity CALCIUM HYPOCHLORITE
Value: 10lbs

ZUS_SAR302 Reportable quantity None established



Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

ZUS_SAR313 De minimis concentration None established

Clean Air Act Toxic ARP Section 112r:

CAA 112R None established

Clean Air Act Socmi:

HON SOC None established

Clean Air Act VOC Section 111:

CAA 111 None established

Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP None established

ZUS_CAAHRP None established

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
10137-74-3	CALCIUM CHLORATE
1305-62-0	CALCIUM HYDROXIDE
7778-54-3	CALCIUM HYPOCHLORITE

ZUSPA_RTK

US. Commonwealth of Pennsylvania - Department of Labor and Industry; Pennsylvania Code Title 34, Labor and Industry Chapter 323
1990-01-01
CHLORIC ACID, CALCIUM SALT
hazardous substance

US. Commonwealth of Pennsylvania - Department of Labor and Industry; Pennsylvania Code Title 34, Labor and Industry Chapter 323
1990-01-01
CALCIUM HYDROXIDE (CA(OH)2)
hazardous substance

US. Commonwealth of Pennsylvania - Department of Labor and Industry; Pennsylvania Code Title 34, Labor and Industry Chapter 323
1990-01-01
HYPOCHLOROUS ACID, CALCIUM SALT
environmental hazard, hazardous substance

New Jersey:

CAS #	COMPONENT NAME
10137-74-3	CALCIUM CHLORATE
1305-62-0	CALCIUM HYDROXIDE



7778-54-3 ZUSNJ_RTK	CALCIUM HYPOCHLORITE
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US. New Jersey Department of Environmental Protection -; Bureau of Hazardous Substances New Jersey Right to Know Law, Hazardous Substance List [P.L. 1983, C. 315, NJSA 34:5A-1 et seq]
1989-12-01
CALCIUM CHLORATE
hazardous substance

US. New Jersey Department of Environmental Protection -; Bureau of Hazardous Substances New Jersey Right to Know Law, Hazardous Substance List [P.L. 1983, C. 315, NJSA 34:5A-1 et seq]
1989-12-01
CALCIUM HYDROXIDE
hazardous substance

US. New Jersey Department of Environmental Protection -; Bureau of Hazardous Substances New Jersey Right to Know Law, Hazardous Substance List [P.L. 1983, C. 315, NJSA 34:5A-1 et seq]
1989-12-01
CALCIUM HYPOCHLORITE
special health hazard substance, special health hazard, reactive - second degree

Massachusetts:

CAS #	COMPONENT NAME
10137-74-3	CALCIUM CHLORATE
1305-62-0	CALCIUM HYDROXIDE
7778-54-3	CALCIUM HYPOCHLORITE

ZUSMA_RTK

US. The Commonwealth of Massachusetts Department of Public Health; Massachusetts Right-to-know law, The Massachusetts Substance List, 105 CMR 670.000
1991-07-01
CALCIUM CHLORATE
massachusetts hazardous substance

US. The Commonwealth of Massachusetts Department of Public Health; Massachusetts Right-to-know law, The Massachusetts Substance List, 105 CMR 670.000
1991-07-01
CALCIUM HYDROXIDE
massachusetts hazardous substance

US. The Commonwealth of Massachusetts Department of Public Health; Massachusetts Right-to-know law, The Massachusetts Substance List, 105 CMR 670.000
1991-07-01
CALCIUM HYPOCHLORITE
massachusetts hazardous substance

California Proposition 65:

CAS #	COMPONENT NAME
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ZUSCA_P65

None established

WHMIS Hazard Classification:



Canada. Canada Hazardous Products Act SOR/88-64
1988-01-20
Concentration by Weight: 1 percent by weight
302
CALCIUM HYDROXIDE

16. OTHER INFORMATION

MSDS REVISION STATUS : Revised to meet the ANSI standard of 16 sections
SECTIONS REVISED: 14
Major References : Available upon request.

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT. .

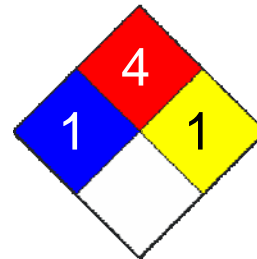
MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name Century Duster – Dust & Lint Remover
Synonym(s) Model # CDS
Model #: CDS8, CDS82
Model #: CDS12
Model #: CDS35
Model #: CDS10E
CAS # Mixture
Product use Dust control
Manufacturer Falcon Safety Products, Inc.
25 Imclone Drive
Branchburg, NJ 08876 US
Phone: 1-908-707-4900
Supplier Falcon Safety Products, Inc.
25 Imclone Drive
Branchburg, NJ 08876
Phone 1-908-707-4900

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 1
Flammability	4
Physical Hazard	1
Personal Protection	X



2. Hazards Identification

Emergency overview DANGER
Flammable gas. Contents under pressure. Containers may explode when heated.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation.

Eyes Contact with liquid may cause frostbite.

Skin Contact with liquid may cause frostbite.

Inhalation Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness). Vapors may cause dizziness or suffocation.

Ingestion Not a normal route of exposure.

Target organs Eyes. Skin. Respiratory system.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Ethane, 1,1-difluoro-	75-37-6	60 - 100

4. First Aid Measures

First aid procedures

Eye contact Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.

Skin contact Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

Inhalation	If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.
Ingestion	Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
General advice	Do not puncture or incinerate container. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Flammable by WHMIS/OSHA criteria. Containers may explode when heated.
Extinguishing media	
Suitable extinguishing media	Do not extinguish burning gas if flow cannot be shut off immediately. Use water spray or fog nozzle to keep cylinder cool
	Small Fires: Dry chemical. Carbon dioxide. Water spray. Fog.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame. Cool containers with flooding quantities of water until well after fire is out.
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Fluoride gases.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Remove sources of ignition. Although the chance of a significant spill or leak is unlikely in aerosol containers, in the event of such an occurrence, absorb spilled material with a non-flammable absorbent such as sand or vermiculite.

7. Handling and Storage

Handling	Avoid breathing mists or aerosols of this product. Use good industrial hygiene practices in handling this material.
Storage	Keep out of reach of children. Do not store at temperatures above 49 °C (120.2°F). Keep away from heat, open flames or other sources of ignition.

8. Exposure Controls / Personal Protection

Exposure limits	
Ingredient(s)	Exposure Limits
Ethane, 1,1-difluoro-	ACGIH-TLV Not established
	OSHA-PEL Not established
Engineering controls	Use only under good ventilation conditions or with respiratory protection.
Personal protective equipment	
Eye / face protection	Wear safety glasses with side shields.

Hand protection	If there is constant skin contact, rubber gloves are recommended.
Skin and body protection	As required by employer code.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands and face before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Clear.
Color	Colorless
Form	Liquefied gas
Odor	Slight ethereal.
Odor threshold	Not available
Physical state	Gas
pH	Not applicable
Melting point	Not available
Freezing point	Not available
Boiling point	-25 °C (-13.00 °F)
Flash point	-50 °C (-58.00 °F)
Pour point	Not available
Evaporation rate	Not available
Flammability limits in air, lower, % by volume	3.9
Flammability limits in air, upper, % by volume	16.9
Vapor pressure	599.43 kPa @25°C
Vapor density	2.4 @25°C (air=1)
Specific gravity	0.91
Relative density	0.9 g/cc @25°C
Octanol/water coefficient	Not available
Solubility (H2O)	Slightly
Auto-ignition temperature	454 °C (849.20 °F)
Percent volatile	100

10. Stability and Reactivity

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Aerosol containers are unstable at temperatures above 49°C (120.2°F).
Incompatible materials	Alkaline materials. Alkaline earth metals.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Fluoride gases.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Ethane, 1,1-difluoro-	> 64000 ppm rat

Component analysis - Oral LD50

Ingredient(s)	LD50
Ethane, 1,1-difluoro-	1500 mg/kg rat

Effects of acute exposure

Eye	Contact with liquid may cause frostbite.
Skin	Contact with liquid may cause frostbite.

Inhalation	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness). Vapors may cause dizziness or suffocation.
Ingestion	Not a normal route of exposure.
Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Chronic effects	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity	Non-hazardous by WHMIS/OSHA criteria.
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.
Reproductive effects	Non-hazardous by WHMIS/OSHA criteria.
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.
Synergistic Materials	Not available

12. Ecological Information

Ecotoxicity	Not available
Environmental effects	Not available
Aquatic toxicity	Not available
Persistence / degradability	Not available
Bioaccumulation / accumulation	Not available
Partition coefficient	Not available
Mobility in environmental media	Not available
Chemical fate information	Not available
Other adverse effects	Not available

13. Disposal Considerations

Waste codes	Not available
Disposal instructions	Review federal, state/provincial, and local government requirements prior to disposal.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Basic shipping requirements:

Proper shipping name	1,1-Difluoroethane
Hazard class	2.1
UN number	1030

Additional information:

Packaging exceptions

NOTE: Falcon Safety Products has been granted a DOT exemption that allows this product to be shipped similar to a Consumer Commodity (ORM-D). A copy of the DOT exemption can be obtained by calling Falcon Safety Products, Inc at 908-707-4900.



Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

Proper shipping name	1,1-Difluoroethane
Hazard class	2.1
UN number	1030
Additional information:	
Packaging exceptions	Limited quantity (containers up to 125mL)



IATA/ICAO (Air)

Basic shipping requirements:

Proper shipping name	1,1-Difluoroethane
Hazard class	2.1
UN number	1030
Additional information:	
Maximum net quantity packaging	Cargo aircraft only – 150 kg maximum (Forbidden on passenger aircraft)



15. Regulatory Information

Canadian federal regulations	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.	
Canada - CEPA - Schedule I - List of Toxic Substances		
Ethane, 1,1-difluoro-	75-37-6	Totally halogenated chlorofluorocarbons that have the molecular formula $C_nCl_xF_{(2n+2-x)}$: (a) quantities that may be manufactured or imported; (b) Prohibition on manufacture, use, sale, offer for sale, import or export except for authorized uses [SOR/89-351, s. 16; 90-453, s. 5; 94-408, s. 24; 92-507, s. 17; 96-237, s. 5]
US Federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List. CERCLA/SARA Hazardous Substances - Not applicable.	
Occupational Safety and Health Administration (OSHA)		
29 CFR 1910.1200 hazardous chemical	Yes	
CERCLA (Superfund) reportable quantity		
None		
Superfund Amendments and Reauthorization Act of 1986 (SARA)		
Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No	
Section 302 extremely hazardous substance	No	
Section 311 hazardous chemical	Yes	
Clean Air Act (CAA)	Not available	
Clean Water Act (CWA)	Not available	

WHMIS status

Controlled

WHMIS classification

Class A - Compressed Gas, Class B - Division 1 - Flammable Gas

WHMIS labeling



State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - Louisiana - Reportable Quantity List for Pollutants

Ethane, 1,1-difluoro- 75-37-6 5000 Lb final RQ; 2270 kg final RQ

U.S. - Massachusetts - Right To Know List

Ethane, 1,1-difluoro- 75-37-6 Present

U.S. - New Jersey - Right to Know Hazardous Substance List

Ethane, 1,1-difluoro- 75-37-6 sn 0715

Inventory name

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date

18-April-2012

Effective date

18-April-2012

Expiry date

18-April-2015

Prepared by

Falcon Safety Products, Inc. (908) 707-4900

Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.



SAFETY DATA SHEET

Issuing Date January 5, 2015

Revision Date New

Revision Number 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Clorox® Bleach

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Laundry and household bleach

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

The Clorox Company of Canada Ltd.
150 Biscayne Crescent
Brampton, Ontario L6W 4V3

Emergency telephone number

Emergency Phone Numbers For Medical Emergencies, call: 1-800-446-1014
For Transportation Emergencies, call Chemtrec: 1-800-424-9300


2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2A
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GHS Label elements, including precautionary statements**Emergency Overview**

Signal word	Warning		
Hazard Statements	Causes serious eye irritation		
			
Appearance	Clear, pale yellow	Physical State	Liquid
		Odor	Bleach

Precautionary Statements - Prevention

Wash hands and any exposed skin thoroughly after handling.
Wear eye protection/face protection such as safety glasses.

Precautionary Statements - Response**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Precautionary Statements - Storage

None

Precautionary Statements - Disposal

None

Hazards not otherwise classified (HNOC)

Not applicable.

Unknown Toxicity

0.06% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Very toxic to aquatic life with long lasting effects.

Interactions with Other Chemicals

Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, and ammonia-containing products to produce hazardous gases, such as chlorine and other chlorinated compounds.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Sodium hypochlorite	7681-52-9	1 - 5	*
Sodium hydroxide	1310-73-2	0.1 - 1	*

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General Advice	Show this safety data sheet to the doctor in attendance.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin Contact	Take off contaminated clothing. Rinse skin with plenty of water. If irritation develops, call a doctor.
Inhalation	Move to fresh air. If breathing is affected, call a doctor.
Ingestion	Drink a glassful of water. Call a poison control center or doctor immediately. DO NOT induce vomiting unless told to do so by a poison control center or doctor.
Protection of First-aiders	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects	Stinging and irritation of eyes.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with eyes, skin, and clothing. Use personal protective equipment as required.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental Precautions See Section 12 for ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products Toilet bowl cleaners, rust removers, acids, and ammonia-containing products.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Appropriate engineering controls

Engineering Measures Showers
 Eyewash stations
 Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection If splashes are likely to occur: Wear safety glasses with side shields (or goggles). None required for consumer use.

Skin and Body Protection Wear rubber or neoprene gloves if there is the potential for repeated or prolonged skin contact.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid	Odor	Bleach
Appearance	Clear	Odor Threshold	No information available
Color	Pale yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	~12.5	None known
Melting/freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	Not flammable	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	~1.05	None known
Water Solubility	Soluble in water	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive Properties	Not explosive	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, and ammonia-containing products to produce hazardous gases, such as chlorine and other chlorinated compounds.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Toilet bowl cleaners, rust removers, acids, and ammonia-containing products.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Exposure to vapor or mist may irritate respiratory tract.
Eye Contact	May cause eye irritation.
Skin Contact	Prolonged contact may cause irritation.
Ingestion	Ingestion may cause irritation to mucous membranes and gastrointestinal tract, nausea, vomiting, and diarrhea.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hypochlorite 7681-52-9	8200 mg/kg (Rat)	>10000 mg/kg (Rabbit)	-
Sodium hydroxide 1310-73-2	-	1350 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms May cause redness and tearing of the eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9	-	Group 3	-	-

*IARC (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans*

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Chronic Toxicity Carcinogenic potential is unknown.

Target Organ Effects Respiratory system, eyes, skin, gastrointestinal tract (GI).

Aspiration Hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document
117.20 mg/l ATEmix (4 hr)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose of in accordance with all applicable federal, state, and local regulations.

Contaminated Packaging

Do not reuse empty containers. Dispose of in accordance with all applicable federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT NOT REGULATED

TDG

UN-No	UN3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard Class	9
Packing Group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III, MARINE POLLUTANT

ICAO

UN-No	UN3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard Class	9
Packing Group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III

IATA

UN-No	UN3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard Class	9
Packing Group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III

IMDG/IMO

UN-No UN3082
Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard Class 9
Packing Group III
EmS No. F-A, S-F
Marine Pollutant Product is a marine pollutant according to the criteria set by IMDG/IMO
Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III, MARINE POLLUTANT

15. REGULATORY INFORMATION

Chemical Inventories

TSCA All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.
DSL/NDSL All components are on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

SARA 313
 Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hypochlorite 7681-52-9	100 lb			X
Sodium hydroxide 1310-73-2	1000 lb			X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium hypochlorite 7681-52-9	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ
Sodium hydroxide 1310-73-2	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Sodium hypochlorite 7681-52-9	X	X	X	X	
Sodium hydroxide 1310-73-2	X	X	X	X	

International Regulations**Canada****WHMIS Hazard Class**

D2B - Toxic materials

**16. OTHER INFORMATION**

NFPA Health Hazard 2 Flammability 0 Instability 0 Physical and Chemical Hazards -

HMIS Health Hazard 2 Flammability 0 Physical Hazard 0 Personal Protection B

Prepared By Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Revision Date New

Revision Note New

Reference 1076851/173214.001

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



FICHE DE DONNÉES DE SÉCURITÉ

Date d'émission 5 janvier 2015

Date de révision Nouvelle

Numéro de révision 0

1. IDENTIFICATION DE LA SUBSTANCE/DE LA PRÉPARATION ET DE LA SOCIÉTÉ/L'ENTREPRISE

Identificateur de produit

Nom du produit Eau de Javel Clorox®

Autres moyens d'identification

Synonymes Aucun

Utilisation recommandée pour le produit chimique et restrictions en matière d'utilisation

Utilisation recommandée Lessive et eau de Javel domestique

Utilisations déconseillées Aucune information disponible

Renseignements concernant le fournisseur de la fiche de données de sécurité

Adresse du fournisseur

The Clorox Company of Canada Ltd.
150 Biscayne Crescent
Brampton, Ontario L6W 4V3

Numéro de téléphone d'urgence

Numéros de téléphone d'urgence Pour des urgences médicales, appelez : 1 800 446-1014
Pour des urgences en matière de transport, appelez Chemtrec : 1 800 424-9300

2. IDENTIFICATION DES DANGERS


Classification

Ce produit chimique est considéré comme dangereux selon la norme sur la communication des renseignements à l'égard des matières dangereuses 2012 d'OSHA (29 CFR 1910.1200)

Lésions oculaires graves/irritation oculaire	Catégorie 2A
--	--------------

Éléments d'étiquetage SGH, y compris les conseils de prudence

Vue d'ensemble des procédures d'urgence

Mot indicateur	Avertissement
Mentions de danger Provoque une sévère irritation des yeux 	
Apparence Transparent, jaune pâle	État physique Liquide
	Odeur Javellisant

Conseils de prudence - Prévention

Se laver les mains et toute peau exposée à fond après manutention.
Porter une protection oculaire/ faciale telle que des lunettes de sécurité.

Conseils de prudence - Réaction

Yeux :

EN CAS DE CONTACT AVEC LES YEUX : Rincer prudemment avec de l'eau pendant plusieurs minutes. Retirer les verres de contact si la victime en porte et qu'il est possible de les retirer facilement. Continuer à rincer. Si l'irritation oculaire persiste : Obtenir une consultation médicale ou des soins médicaux.

Conseils de prudence - Stockage

Aucun

Conseils de prudence - Élimination

Aucun

Dangers non classés ailleurs (DNCA)

Sans objet.

Toxicité inconnue

0,06 % du mélange est constitué d'ingrédients de toxicité inconnue

Autres informations

Très toxique pour les organismes aquatiques, entraîne des effets à long terme

Interactions avec d'autres produits chimiques

Réagit avec d'autres produits chimiques domestiques tels que nettoyants de cuvette de toilette, les produits antirouille, les acides et les produits à base d'ammoniac pour produire des gaz dangereux, comme le chlore et autres produits chlorés.

3. COMPOSITION / INFORMATION SUR LES COMPOSANTS

Nom chimique	N° CAS	% en poids	Secret commercial
Hypochlorite de sodium	7681-52-9	1 - 5	*
Hydroxyde de sodium	1310-73-2	0,1 - 1	*

* Le pourcentage (concentration) exact de composition est retenu comme un secret commercial.

4. PREMIERS SOINS

Premiers soins

Conseils généraux	Présenter cette fiche signalétique au médecin traitant.
Contact avec les yeux	Rincer immédiatement avec une grande quantité d'eau, également sous les paupières, pendant au moins quinze minutes. Retirer les verres de contact si la victime en porte et qu'il est possible de les retirer facilement. Continuer à rincer. Garder les yeux grands ouverts lors du rinçage. Ne pas frotter la partie touchée. Obtenir des soins médicaux si une irritation se produit et persiste.
Contact avec la peau	Retirer les vêtements contaminés. Rincer la peau avec beaucoup d'eau. En cas d'irritation, appeler un médecin.
Inhalation	Déplacer à l'air frais. Si la respiration est touchée, appeler un médecin.
Ingestion	Boire un verre d'eau. Appeler immédiatement un centre antipoison ou un médecin. NE PAS provoquer de vomissements à moins d'en avoir reçu la directive d'un centre antipoison ou d'un médecin.
Protection des secouristes	Éviter le contact avec la peau, les yeux ou les vêtements. Utiliser l'équipement de protection individuel requis. Porter des vêtements de protection individuelle (voir la section 8).

Symptômes/effets les plus importants, aigus et retardés

Symptômes/effets les plus importants	Picotement et irritation des yeux.
---	------------------------------------

Indications quant à la nécessité éventuelle d'une prise en charge médicale immédiate ou d'un traitement spécial

Notes au médecin	Traiter en fonction des symptômes.
-------------------------	------------------------------------

5. MESURES À PRENDRE EN CAS D'INCENDIE

Agents extincteurs appropriés

Utiliser des mesures d'extinction appropriées aux circonstances locales et à l'environnement immédiat.

Agents extincteurs inappropriés

ATTENTION : L'utilisation d'une pulvérisation d'eau pour combattre un incendie peut se révéler inefficace.

Dangers spécifiques du produit

Aucune information disponible.

Données sur les risques d'explosion

Sensibilité à un choc mécanique Aucune.

Sensibilité à une décharge statique Aucune.

Équipement de protection et précautions pour les pompiers

Comme avec tout incendie, porter un appareil respiratoire autonome à demande de pression, MSHA/NIOSH (homologué ou équivalent) et une tenue de protection complète.

6. MESURES À PRENDRE EN CAS DE DÉVERSEMENTS ACCIDENTELS

Précautions individuelles, équipement de protection et mesures d'urgence

Précautions individuelles Éviter tout contact avec les yeux, la peau et les vêtements. Utiliser l'équipement de protection individuelle requis.

Autres informations Consulter les mesures de protection données aux sections 7 et 8.

Précautions relatives à l'environnement

Précautions relatives à l'environnement Voir la Section 12 pour des données écologiques.

Méthodes et matériaux pour l'isolation et le nettoyage

Méthodes d'isolation Empêcher d'autres fuites ou déversements lorsqu'il est possible de le faire en toute sécurité.

Méthodes de nettoyage Absorber et conteneuriser. Laver les résidus et les envoyer à un égout sanitaire. Contacter une installation de traitement sanitaire à l'avance pour s'assurer de sa capacité à traiter le matériel emporté.

7. MANUTENTION ET STOCKAGE

Précautions relatives à la sécurité de manutention

Manutention Manipuler conformément aux bonnes pratiques de sécurité et d'hygiène industrielle. Éviter le contact avec la peau, les yeux et les vêtements. Ne pas manger, boire ou fumer en manipulant le produit.

Conditions de sécurité de stockage, y compris les incompatibilités

Stockage Conserver les récipients bien fermés dans un endroit sec, frais et bien ventilé.

Produits incompatibles Nettoyants de cuvette de toilette, les produits antirouille, les acides et les produits à base d'ammoniac.

8. CONTRÔLE DE L'EXPOSITION/PROTECTION INDIVIDUELLE

Paramètres de contrôle

Directives relatives à l'exposition

Nom chimique	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydroxyde de sodium 1310-73-2	Valeur plafond : 2 mg/m ³	TWA : 2 mg/m ³	IDLH : 10 mg/m ³ Valeur plafond : 2 mg/m ³

ACGIH TLV : Conférence américaine des hygiénistes industriels gouvernementaux - valeur limite d'exposition OSHA PEL : Administration de la sécurité et de la santé professionnelle - limites d'exposition admissibles NIOSH IDLH : Dangereux immédiatement pour la santé ou la vie.

Contrôles d'ingénierie appropriés

Mesures techniques Douches
Douches oculaires
Systèmes de ventilation

Mesures de protection individuelle telles que les équipements de protection individuelle

Protection des yeux/du visage En cas d'éclaboussures probables : Porter des lunettes de sécurité à écrans latéraux (ou des lunettes à coques). Aucune nécessaire pour une utilisation par le consommateur.

Protection de la peau et du corps Porter des gants en caoutchouc ou en néoprène s'il existe une possibilité d'un contact répété ou prolongé avec la peau.

Protection respiratoire En cas d'irritation ou de dépassement des limites d'exposition, vous devez porter une protection respiratoire approuvée NIOSH/MSHA. Des respirateurs à adduction d'air à pression positive peuvent être requis pour des concentrations élevées de contaminants atmosphériques. Une protection respiratoire doit être fournie conformément à la réglementation locale en cours.

Mesures d'hygiène Retirer et laver les vêtements contaminés avant de les réutiliser. Éviter le contact avec la peau, les yeux ou les vêtements. Ne pas manger, boire ou fumer en manipulant le produit.

9. PROPRIÉTÉS PHYSIQUES ET CHIMIQUES

Propriétés physiques et chimiques

État physique	Liquide	Odeur	Javellisant
Apparence	Transparent	Seuil olfactif	Aucune information disponible
Couleur	Jaune pâle		

<u>Propriété</u>	<u>Valeurs</u>	<u>Remarques/ Méthode</u>
pH	~ 12,5	Aucune connue
Point de fusion/point de congélation	Aucune donnée disponible	Aucune connue
Point d'ébullition / Domaine d'ébullition	Aucune donnée disponible	Aucune connue
Point d'éclair	Ininflammable	Aucune connue
Taux d'évaporation	Aucune donnée disponible	Aucune connue
Inflammabilité (solide, gaz)	Aucune donnée disponible	Aucune connue
Limites d'inflammabilité dans l'air		
Limite supérieure d'inflammabilité	Aucune donnée disponible	Aucune connue
Limite inférieure d'inflammabilité	Aucune donnée disponible	Aucune connue
Tension de vapeur	Aucune donnée disponible	Aucune connue
Densité de la vapeur	Aucune donnée disponible	Aucune connue
Densité	~ 1,05	Aucune connue
Solubilité dans l'eau	Soluble dans l'eau	Aucune connue
Solubilité dans d'autres solvants	Aucune donnée disponible	Aucune connue
Coefficient de partage : n-octanol/eau	Aucune donnée disponible	Aucune connue
Température d'auto-inflammation	Aucune donnée disponible	Aucune connue
Température de décomposition	Aucune donnée disponible	Aucune connue
Viscosité cinématique	Aucune donnée disponible	Aucune connue
Viscosité dynamique	Aucune donnée disponible	Aucune connue
Propriétés explosives	Non explosif	
Propriétés comburantes	Aucune donnée disponible	
 <u>Autres informations</u>		
Point de ramollissement	Aucune donnée disponible	
Teneur en COV (%)	Aucune donnée disponible	
Dimension de particules	Aucune donnée disponible	
Distribution granulométrique	Aucune donnée disponible	

10. STABILITÉ ET RÉACTIVITÉ

Réactivité

Réagit avec d'autres produits chimiques domestiques tels que nettoyants de cuvette de toilette, les produits antirouille, les acides et les produits à base d'ammoniac pour produire des gaz dangereux, comme le chlore et autres produits chlorés.

Stabilité chimique

Stable dans les conditions de stockage recommandées.

Risque de réactions dangereuses

Aucun dans des conditions normales de traitement.

Conditions à éviter

Aucune connue selon les renseignements fournis.

Matériaux incompatibles

Nettoyants de cuvette de toilette, les produits antirouille, les acides et les produits à base d'ammoniac.

Produits de décomposition dangereux

Aucune connue selon les renseignements fournis.

11. DONNÉES TOXICOLOGIQUES

Les voies d'exposition probables

Renseignements sur le produit

Inhalation	Une exposition aux vapeurs ou à la brume peut irriter les voies respiratoires.
Contact avec les yeux	Peut causer une irritation des yeux.
Contact avec la peau	Un contact prolongé peut causer une irritation.
Ingestion	Une ingestion peut provoquer une irritation des muqueuses et du tractus gastro-intestinal, des nausées, des vomissements et une diarrhée.

Informations sur les composants

Nom chimique	DL ₅₀ orale	DL ₅₀ cutanée	CL ₅₀ par inhalation
Hypochlorite de sodium 7681-52-9	8 200 mg/kg (rat)	> 10 000 mg/kg (lapin)	-
Hydroxyde de sodium 1310-73-2	-	1350 mg/kg (lapin)	-

Informations sur les effets toxicologiques

Symptômes Peut causer une rougeur et un larmolement des yeux.

Les effets retardés et immédiats ainsi que les effets chroniques dus à une exposition à court et long terme

Sensibilisation Aucune information disponible.

Effets mutagènes Aucune information disponible.

Cancérogénicité Le tableau ci-dessous indique si chaque agence a inscrit un ingrédient comme étant cancérigène.

Nom chimique	ACGIH	CIRC	NTP	OSHA
Hypochlorite de sodium 7681-52-9	-	Groupe 3	-	-

CIRC (Centre international de recherche sur le cancer)

Groupe 3 - Ne peut être classifié pour la cancérogénicité chez les humains

Toxicité pour la reproduction	Aucune information disponible.
Toxicité pour certains organes cibles - exposition unique	Aucune information disponible.
Toxicité pour certains organes cibles - exposition répétée	Aucune information disponible.
Toxicité chronique	Le potentiel cancérogène est inconnu.
Effets sur les organes cibles	Appareil respiratoire, yeux, peau, tractus gastro-intestinal (GI).
Danger par aspiration	Aucune information disponible.

Valeurs numériques de la toxicité - Information sur le produit

Les valeurs suivantes sont calculées selon le chapitre 3.1 du document SGH :
117,20 mg/l ETAmél (4 h)

12. DONNÉES ÉCOLOGIQUES

Écotoxicité

Très toxique pour les organismes aquatiques, entraîne des effets à long terme.

Persistance et dégradation

Aucune information disponible.

Bioaccumulation

Aucune information disponible.

Autres effets nocifs

Aucune information disponible.

13. DONNÉES SUR L'ÉLIMINATION DU PRODUIT

Méthodes d'élimination

Éliminer conformément à tous les règlements fédéraux, provinciaux et locaux.

Récipients contaminés

Ne pas réutiliser les récipients vides. Éliminer conformément à tous les règlements fédéraux, provinciaux et locaux.

14. INFORMATIONS RELATIVES AU TRANSPORT

<u>DOT</u>	NON RÉGLEMENTÉ
<u>TMD</u>	
Numéro ONU	UN3082
Désignation officielle de transport	MATIÈRE DANGEREUSE DU POINT DE VUE DE L'ENVIRONNEMENT, LIQUIDE, N.S.A.
Classe de danger	9
Groupe d'emballage	III
Description	UN3082, MATIÈRE DANGEREUSE DU POINT DE VUE DE L'ENVIRONNEMENT, LIQUIDE, N.S.A. (HYPOCHLORITE DE SODIUM), 9, III, POLLUANT MARIN

OACI :

Numéro ONU	UN3082
Désignation officielle de transport	MATIÈRE DANGEREUSE DU POINT DE VUE DE L'ENVIRONNEMENT, LIQUIDE, N.S.A.
Classe de danger	9
Groupe d'emballage	III
Description	UN3082, MATIÈRE DANGEREUSE DU POINT DE VUE DE L'ENVIRONNEMENT, LIQUIDE, N.S.A. (HYPOCHLORITE DE SODIUM), 9, III

IATA

Numéro ONU	UN3082
Désignation officielle de transport	MATIÈRE DANGEREUSE DU POINT DE VUE DE L'ENVIRONNEMENT, LIQUIDE, N.S.A.
Classe de danger	9
Groupe d'emballage	III
Description	UN3082, MATIÈRE DANGEREUSE DU POINT DE VUE DE L'ENVIRONNEMENT, LIQUIDE, N.S.A. (HYPOCHLORITE DE SODIUM), 9, III

IMDG/OMI

Numéro ONU	UN3082
Désignation officielle de transport	MATIÈRE DANGEREUSE DU POINT DE VUE DE L'ENVIRONNEMENT, LIQUIDE, N.S.A.
Classe de danger	9
Groupe d'emballage	III
EmS N°	F-A, S-F
Polluant marin	Le produit est un polluant marin selon les critères fixés par l'IMDG/OMI
Description	UN3082, MATIÈRE DANGEREUSE DU POINT DE VUE DE L'ENVIRONNEMENT, LIQUIDE, N.S.A. (HYPOCHLORITE DE SODIUM), 9, III, POLLUANT MARIN

15. INFORMATIONS SUR LA RÉGLEMENTATION**Inventaire de produits chimiques**

TSCA Tous les composants de ce produit sont soit inscrits sur l'inventaire TSCA 8(b) ou sont exempts d'inscription.

LIS/LES Tous les composants sont inclus dans la LIS ou la LES.

TSCA - États-Unis - Section 8 (b) de l'inventaire TSCA (loi réglementant les substances toxiques)

LIS/LES – liste intérieure des substances/liste extérieure des substances pour le Canada

ÉTATS-UNIS Règlements fédéraux**SARA 313**

Section 313 du titre III de la loi du Superfund Amendments and Reauthorization Act de 1986 (SARA). Ce produit ne contient aucun produit chimique soumis aux exigences en matière de rapport de la Loi et du titre 40 du Code of Federal Regulations, partie 372

SARA 311/312 Catégories de dangers

Risque aigu pour la santé	Oui
Danger chronique pour la santé	Non
Risque d'incendie	Non
Danger de libération soudaine de pression	Non
Danger de réaction	Non

Loi sur la qualité de l'eau (Clean Water Act)

Ce produit contient les substances suivantes qui sont des polluants réglementés conformément à la loi sur la qualité de l'eau (Clean Water Act) (40 CFR 122.21 et 40 CFR 122.42)

Nom chimique	CWA - quantités à déclarer	CWA - polluants toxiques	CWA - polluants prioritaires	CWA - substances dangereuses
Hypochlorite de sodium 7681-52-9	100 lb			X
Hydroxyde de sodium 1310-73-2	1000 lb			X

CERCLA

Sous sa forme commerciale, ce produit contient une ou plusieurs substances réglementées comme une substance dangereuse en vertu de CERCLA (Comprehensive Environmental Response Compensation and Liability Act) (40 CFR 302)

Nom chimique	Quantités à déclarer de substances dangereuses	Quantités à déclarer de substances très dangereuses	Quantité à déclarer (QD)
Hypochlorite de sodium 7681-52-9	100 lb	-	QD 100 lb QD finale QD 45,4 kg QD finale
Hydroxyde de sodium 1310-73-2	1000 lb	-	QD 1000 lb QD finale QD 454 kg QD finale

États-Unis - Réglementation des états**Proposition 65 de la Californie**

Ce produit ne contient aucun produit chimique de la proposition 65.

Règlement d'état sur le droit à l'information aux États-Unis

Nom chimique	New Jersey	Massachusetts	Pennsylvanie	Rhode Island	Illinois
Hypochlorite de sodium 7681-52-9	X	X	X	X	
Hydroxyde de sodium 1310-73-2	X	X	X	X	

Règlements internationaux**Canada****Classe de dangers du SIMDUT**

D2B - Matières toxiques

**16. AUTRES INFORMATIONS**

NFPA Danger pour la santé 2 Inflammabilité 0 Instabilité 0 Propriétés physiques et chimiques -

HMIS Danger pour la santé 2 Inflammabilité 0 Danger physique 0 Protection individuelle B

Préparée par Product Stewardship
23 British American Blvd.
Latham, NY 12110
1 800 572-6501

Date de révision Nouvelle

Note de révision Nouvelle

Référence 1076851/173214.001

Avis de non-responsabilité général

À notre connaissance et selon nos renseignements et notre opinion à la date de publication de cette fiche signalétique, les renseignements fournis dans cette dernière sont exacts. Les renseignements donnés sont conçus uniquement comme un guide pour la manipulation, l'utilisation, le traitement, l'entreposage, le transport, l'élimination et le rejet sécuritaires du produit et ne doivent pas être considérés comme une garantie ou une norme de qualité. Les renseignements sont liés uniquement au produit particulier indiqué et peuvent ne pas être valides pour un tel produit utilisé en association avec toute autre substance ou dans tout autre procédé, sauf si indiqué dans le texte.

Fin de la fiche signalétique



The Clorox Company
1221 Broadway
Oakland, CA 94612
Tel. (510) 271-7000

Material Safety Data Sheet

I Product:	CLOROX® DISINFECTING WIPES	
Description:	FRAGRANCED, MOISTENED TOWELETTE	
Other Designations	Distributor	Emergency Telephone Nos.
EPA Reg. No. 5813-58	Clorox Sales Company 1221 Broadway Oakland, CA 94612	For Medical Emergencies call: (800) 446-1014 For Transportation Emergencies Chemtrac (800) 424-9300

II Health Hazard Data	III Hazardous Ingredients														
<p>Eye Contact: Can cause moderate eye irritation.</p> <p>Ingestion: Liquid should be practically non-toxic if ingested.</p> <p>Skin Contact: Prolonged skin contact may produce minor irritation.</p> <p>FIRST AID: EYES- Flush with plenty of water. Call a physician if irritation persists. IF SWALLOWED- Drink a glassful of water. Call a physician or poison control center. SKIN- Wash thoroughly with soap and water after handling. INHALATION- If breathing is affected, move to fresh air.</p> <p>Under normal consumer use conditions the likelihood of any adverse health effects are low.</p>	<table border="1"> <thead> <tr> <th>Ingredient</th> <th>Concentration</th> <th>Worker Exposure Limit</th> </tr> </thead> <tbody> <tr> <td>n-Alkyl (C14, 60%; C16, 30% C12, 5%; C18, 5%) dimethylbenzyl ammonium chloride</td> <td>0.145%</td> <td>Not established</td> </tr> <tr> <td>n-Alkyl (C12, 68%, C14, 32%) Dimethyl Ethylbenzyl ammonium chloride</td> <td>0.145%</td> <td>Not established</td> </tr> <tr> <td>Isopropanol CAS #67-63-0</td> <td>1- 5%</td> <td>400 ppm/500 ppm¹ 400 ppm²</td> </tr> </tbody> </table> <p>¹1998 ACGIH, TLV-TWA/STEL TLV-TWA- Threshold Limit Value-Time Weighted Average. STEL- Short Term Exposure Limit ²PEL- OSHA Permissible Exposure Limit</p> <p>None of the ingredients in this product are on the IARC, NTP or OSHA carcinogen lists.</p>	Ingredient	Concentration	Worker Exposure Limit	n-Alkyl (C14, 60%; C16, 30% C12, 5%; C18, 5%) dimethylbenzyl ammonium chloride	0.145%	Not established	n-Alkyl (C12, 68%, C14, 32%) Dimethyl Ethylbenzyl ammonium chloride	0.145%	Not established	Isopropanol CAS #67-63-0	1- 5%	400 ppm/500 ppm ¹ 400 ppm ²		
Ingredient	Concentration	Worker Exposure Limit													
n-Alkyl (C14, 60%; C16, 30% C12, 5%; C18, 5%) dimethylbenzyl ammonium chloride	0.145%	Not established													
n-Alkyl (C12, 68%, C14, 32%) Dimethyl Ethylbenzyl ammonium chloride	0.145%	Not established													
Isopropanol CAS #67-63-0	1- 5%	400 ppm/500 ppm ¹ 400 ppm ²													

IV Special Protection and Precautions	V Transportation and Regulatory Data
<p>No special protection or precautions have been identified for using this product under directed consumer use conditions.</p> <p>The following recommendations are given for production facilities and for other conditions and situations where there is increased potential for accidental, large-scale or prolonged exposure.</p> <p>Hygienic Practices- Wear safety glasses. Use rubber or nitrile gloves if in contact liquid, especially for prolonged periods.</p> <p>Engineering Controls: Use general ventilation to minimize exposure to vapor or mist.</p> <p>Work Practices: Avoid eye and skin contact and Inhalation of vapor or mist. Avoid contact with food. Not for personal cleansing.</p> <p>KEEP OUT OF THE REACH OF CHILDREN</p>	<p>U.S. DOT, IATA, IMG Hazard Class: Not restricted.</p> <p>U.S. DOT Proper Shipping Name: None</p> <p>EPA- SARA Title III/CERCLA: Product may be regulated under Sections 311/312. This product contains no chemicals regulated under Section 304/CERCLA or Section 313.</p> <p>TSCA/DSL: All chemicals in this product are listed on the TSCA Inventory. The DSL status for some components has not been determined.</p>

VI Spill Procedures/Waste Disposal	VII Reactivity Data
<p>Spill Procedures: Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed down material.</p> <p>Waste Disposal: Disposal must be made in accordance with applicable federal, state and local regulations.</p>	<p>Stability: Mixing with sodium hypochlorite may release small amounts of formaldehyde gas.</p> <p>Storage/Disposal: Do not use or store near heat or open flame.</p>

VIII Fire and Explosion Data	IX Physical Data
<p>Flashpoint: >119°F Method: Closed cup. Unusual Fire and Explosion Hazards: None</p>	<p>Flashpoint..... >119°F Specific Gravity..... 0.99 g/cc. pH..... 5.0-6.0 Solubility in Water..... Liquid is completely dispersible</p>

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DATA SUPPLIED IS FOR USE ONLY IN CONNECTION WITH OCCUPATIONAL SAFETY AND HEALTH DATE PREPARED 7/06

DPD REAGENT #1

Product: CR-0001

Section 1: PRODUCT INFORMATION

Chemical family: Inorganic salt solution.

Product uses: Chemical.

Supplier: Lowry & Associates, div. of Chem-Aquascience, Inc
Canadian Master Distributors for Taylor Technologies, Inc.
4-1151 Gorham Street
Newmarket, ON.
L3Y 8Y1
Tel: 905-836-0505
Fax: 905-895-4539.

Emergency Phone Number: Canutec 613-996-6666.

Manufacturer: Taylor Technologies Inc.
31 Loveton Circle
Sparks, MD USA 21152
Tel: 410-472-4340.

TDG classification: Not regulated.

WHMIS classification:

D2B



DSL status: The substance(s) listed in section 2 appear on the Domestic Substances List.

Product name: DPD Reagent #1.

Section 2: HAZARDOUS INGREDIENTS

C.A.S.	CONCENTRATION %	Ingredient Name	T.L.V.	LD/50	LC/50
7558-79-4	<10	DISODIUM PHOSPHATE	NOT AVAILABLE	17,000 MG/KG RAT ORAL	NOT AVAILABLE
7778-77-0	<10	POTASSIUM PHOSPHATE	NOT AVAILABLE	>4640 MG/KG RABBIT DERMAL	NOT AVAILABLE

Section 2A: ADDITIONAL INGREDIENT INFORMATION

Note: Balance: Water (CAS# 7732-18-5).
(supplier).

Section 3: PHYSICAL DATA

Physical state: Liquid.

Appearance & odor: Odourless.
Clear, colourless.

Odor threshold (ppm): Not available.

Vapour pressure (mmHg): 17

Vapour density (air=1): .64

Volatiles (%)

By volume: 68

**Evaporation rate
(butyl acetate = 1):** Not available.

Boiling point (°C): 100

Freezing point (°C): Not available.

pH: 10

Specific gravity @ 20 °C: 1.24

Solubility in water (%): Soluble.

Coefficient of water\oil dist.: Not available.

Section 4: FIRE & EXPLOSION DATA

Flammability: Not flammable.

Conditions of flammability: Surrounding fire.

Extinguishing media: Carbon dioxide, dry chemical, foam.
Water spray.

Special procedures: Wear a positive-pressure, self-contained breathing apparatus and full protective equipment.

Auto-ignition temperature (°C): Not applicable.

Flash point (°C), method: Not applicable.

**Lower flammability
limit (% vol):** Not applicable.

**Upper flammability
limit (% vol):** Not applicable.

Explosion Data

Sensitivity to static discharge: Not applicable.

Sensitivity to mechanical impact: Not applicable.

Hazardous combustion products: Oxides of phosphorus (PO_x).

Explosive power: Not applicable.

Section 5: REACTIVITY DATA

Chemical stability: Stable under normal conditions.

Conditions of instability: Extreme temperatures.
Extreme heat.

Hazardous polymerization: Not available.

Incompatible substances: None known.

**Hazardous decomposition
products:** See hazardous combustion products.

Section 6: TOXICOLOGICAL PROPERTIES

Route of entry: Ingestion and skin contact.

Effects of acute exposure

Eye contact: Irritant.

Skin contact: May cause irritation.

Inhalation: May be harmful if inhaled.

Ingestion: Irritant.
May cause gastro-intestinal irritation.
May cause nausea and diarrhea.

Effects of chronic exposure: Pre-existing eye and skin disorders may be aggravated by exposure to this product.

LD50 of product, species & route: Not available for mixture, see the ingredients section.

LC50 of product, species & route: Not available.

Exposure limit of material: Not available.

Sensitization to product: Not available.

Carcinogenic effects: Not listed as a carcinogen.

Reproductive effects: Not available.

Teratogenicity: Not available.

Mutagenicity: Not available.

Synergistic materials: Not available.

Section 7: PREVENTATIVE MEASURES

Precautionary Measures

Gloves/Type:



General work gloves to minimize skin contact.

Respiratory/Type:



Wear a NIOSH approved respirator if TLV is exceeded.

Eye/Type:



Safety glasses.

Footwear/Type: Safety shoes per local regulations.

Clothing/Type:



Lab coat.

Other/Type: Eye wash facility should be in close proximity.
Emergency shower should be in close proximity.

Ventilation requirements: Provide sufficient mechanical ventilation to maintain exposure below TLV.

Leak/Spill: Absorb with inert material.
Wear appropriate protective equipment.
Place in a closed container for disposal.

Waste disposal: In accordance with municipal, provincial and federal regulations.

Handling procedures and equipment: Avoid breathing vapors/mists.
Use adequate ventilation.
Wear personal protective equipment appropriate to task.
Wash thoroughly after handling.
Avoid contact with skin, eyes and clothing.
Launder contaminated clothing prior to reuse.

Storage requirements: Keep out of direct sunlight.
Store in a cool and dry place.

Special shipping information: See transportation information.

Section 8: FIRST AID MEASURES

Skin contact: Remove contaminated clothing.
Wash thoroughly with soap and water.
Seek medical attention if irritation persists.

Eye contact: Immediately flush with cool water for at least 20 minutes.
Hold eyelids apart to ensure flushing of entire eye surface.
Get medical attention.

Inhalation: Remove victim to fresh air.
If irritation occurs, consult a physician.

Ingestion: Never give anything by mouth to an unconscious person.
Drink a large amount of water.
Do not induce vomiting, seek immediate medical attention.

Additional information: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any inaccuracies.

Section 9: ADDITIONAL INFORMATION

General note: This material safety data sheet was prepared from information obtained from various sources, including product suppliers and the Canadian Center for Occupational Health and Safety.

Data prepared by: Lowry & Associates, div. of Chem–Aquascience, Inc
Canadian Master Distributors for Taylor Technologies, Inc.
4–1151 Gorham Street
Newmarket, ON.
L3Y 8Y1
Tel: 905–836–0505
Fax: 905–895–4539.

Supplier MSDS date: 2012/06/07.

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DPD REAGENT #2

Product: CR-0002

Section 1: PRODUCT INFORMATION

Chemical family: Acidic organic amine solution.

Product uses: Test chlorine levels in pools and spas.

Supplier: Lowry & Associates, div. of Chem-Aquascience, Inc
Canadian Master Distributors for Taylor Technologies, Inc.
4-1151 Gorham Street
Newmarket, ON.
L3Y 8Y1
Tel: 905-836-0505
Fax: 905-895-4539.

Emergency Phone Number: Canutec 613-996-6666.

Manufacturer: Taylor Technologies Inc.
31 Loveton Circle
Sparks, MD USA 21152
Tel: 410-472-4340.

TDG classification: Not regulated.

WHMIS classification:

D2B



DSL status: Cas# 6283-63-2 does not appear on the DSL or NDSL.

Product name: DPD Reagent #2

Controlled Product Identifier: DPD REAGENT #2
HMIRC Registration Number: 8162
Filing Date: April 7, 2011
Exemption granted on February 24, 2012.

Section 2: HAZARDOUS INGREDIENTS

C.A.S.	CONCENTRATION %	Ingredient Name	T.L.V.	LD/50	LC/50
	5-10**	ORGANIC ACID	NOT AVAILABLE	1400 MG/KG RAT ORAL <hr/> 7940 MG/KG RABBIT SKIN	NOT AVAILABLE
6283-63-2	0.1-1**	N,N-DIETHYL-P-PHENYLENE-DIAMINE SULFATE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE

Section 2A: ADDITIONAL INGREDIENT INFORMATION

*: Organic Acid – HMIRC Registry No. 8162
Exemption was granted on February 24, 2012.

** : Units of concentration are % vol/vol.

Section 3: PHYSICAL DATA

Physical state: Liquid.

Appearance & odor: Odourless.
Clear, colourless.

Odor threshold (ppm): Not available.

Vapour pressure (mmHg): 17

Vapour density (air=1): .65

Volatiles (%)

By volume: 99

Evaporation rate (butyl acetate = 1): Not available.

Boiling point (°C): 100

Freezing point (°C): Not available.

pH: 1.3

Specific gravity @ 20 °C: 1.01

Solubility in water (%): Soluble.

Coefficient of water\oil dist.: Not available.

Section 4: FIRE & EXPLOSION DATA

Flammability: Not flammable.

Conditions of flammability: Surrounding fire.

Extinguishing media: As suitable for surrounding fire.

Special procedures: Wear a positive-pressure, self-contained breathing apparatus and full protective equipment.

Auto-ignition temperature (°C): Not applicable.

Flash point (°C), method: Not applicable.

Lower flammability limit (% vol): Not applicable.

Upper flammability limit (% vol): Not applicable.

Explosion Data

Sensitivity to static discharge: Not applicable.

Sensitivity to mechanical impact: Not applicable.

Hazardous combustion products: Oxides of carbon (CO, CO₂).
Oxides of nitrogen (NO_x).
Oxides of phosphorus (PO_x).
Hydrogen cyanide gas (HCN).
Oxides of sulfur (SO_x).
Contact with metals may produce flammable hydrogen gas.
Phosphine oxides.

Explosive power: Not applicable.

Section 5: REACTIVITY DATA

Chemical stability: Stable under normal conditions.

Conditions of instability: Extreme temperatures.
Extreme heat.

Hazardous polymerization: Not available.

Incompatible substances: Metals.
Strong caustics.
Oxidizers.

Hazardous decomposition products: See hazardous combustion products.

Section 6: TOXICOLOGICAL PROPERTIES

Route of entry: Ingestion and skin contact.

Effects of acute exposure

Eye contact: Irritant.
Organic acid has caused eye corrosion in animals.

Skin contact: May cause dermatitis.
Irritant.

Inhalation: May be harmful if inhaled.

Ingestion: Irritant.
May cause diarrhea.
May cause gastro-intestinal irritation.
May cause cramps.
Toxic

Effects of chronic exposure: Pre-existing eye and skin disorders may be aggravated by exposure to this product.

LD50 of product, species & route: Not available for mixture, see the ingredients section.

LC50 of product, species & route: Not available.

Exposure limit of material: Not available.

Sensitization to product: Not available.

Carcinogenic effects: Not listed as a carcinogen.

Reproductive effects: Not available.


Teratogenicity: Not available.

Mutagenicity: Not available.

Synergistic materials: Not available.

Section 7: PREVENTATIVE MEASURES

Precautionary Measures

Gloves/Type: 


General work gloves to minimize skin contact.

Respiratory/Type: If working area is not ventilated, wear an approved respirator.
Not necessary, if adequate ventilation provided.

Eye/Type: 

Splash proof chemical safety goggles or face shield.

Footwear/Type: Safety shoes per local regulations.

Clothing/Type: 

Lab coat.

Other/Type: Eye wash facility should be in close proximity.
Emergency shower should be in close proximity.

Ventilation requirements: Adequate general ventilation.

Leak/Spill: Absorb with inert material.
Wear appropriate protective equipment.
Neutralize with soda ash.
Place in a closed container for disposal.

Waste disposal: In accordance with municipal, provincial and federal regulations.

Handling procedures and equipment: Avoid breathing vapors/mists.
Use adequate ventilation.
Wear personal protective equipment appropriate to task.
Wash thoroughly after handling.
Avoid contact with skin, eyes and clothing.
Launder contaminated clothing prior to reuse.

Storage requirements: Keep out of direct sunlight.
Store in a cool and dry place.

Special shipping information: See transportation information.

Section 8: FIRST AID MEASURES

Skin contact: Remove contaminated clothing. Wash affected area with soap and water. Get medical attention.

Eye contact: Immediately flush the eyes with lukewarm, gently flowing water for at least 30 minutes holding eyelids open. Seek medical attention immediately.

Inhalation: Remove victim to fresh air.
If irritation occurs, consult a physician.

Ingestion: Never give anything by mouth to an unconscious person.
Do not induce vomiting, seek immediate medical attention.

Additional information: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any inaccuracies.

Section 9: ADDITIONAL INFORMATION

General note: This material safety data sheet was prepared from information obtained from various sources, including product suppliers and the Canadian Center for Occupational Health and Safety.

Data prepared by: Lowry & Associates, div. of Chem–Aquascience, Inc
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4–1151 Gorham Street
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Fax: 905–895–4539.

Supplier MSDS date: 2012/06/08.

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DPD REAGENT #3

Product: CR-0003

Section 1: PRODUCT INFORMATION

Chemical family: Inorganic salt solution.

Product uses: Chemical.

Supplier: Lowry & Associates, div. of Chem-Aquascience, Inc
Canadian Master Distributors for Taylor Technologies, Inc.
4-1151 Gorham Street
Newmarket, ON.
L3Y 8Y1
Tel: 905-836-0505
Fax: 905-895-4539.

Emergency Phone Number: Canutec 613-996-6666.

Manufacturer: Taylor Technologies Inc.
31 Loveton Circle
Sparks, MD USA 21152
Tel: 410-472-4340.

TDG classification: Not regulated.

WHMIS classification:

D2A



DSL status: The substance(s) listed in section 2 appear on the Domestic Substances List.

Product name: DPD Reagent #3.

Section 2: HAZARDOUS INGREDIENTS

C.A.S.	CONCENTRATION %	Ingredient Name	T.L.V.	LD/50	LC/50
7681-11-0	<20	POTASSIUM IODIDE	0.01 PPM	NOT AVAILABLE	NOT AVAILABLE

Section 2A: ADDITIONAL INGREDIENT INFORMATION

Note: Balance: Water (CAS# 7732-18-5).
(supplier).
CAS# 7681-11-0 LD50 1862 mg/kg mouse oral.

Section 3: PHYSICAL DATA

Physical state: Liquid.

Appearance & odor: Odourless.
Clear, colourless.

Odor threshold (ppm): Not available.

Vapour pressure (mmHg): 17

Vapour density (air=1): .6

Volatiles (%)

By volume: 80

**Evaporation rate
(butyl acetate = 1):** Not available.

Boiling point (°C): 100

Freezing point (°C): Not available.

pH: 7.6

Specific gravity @ 20 °C: 1.07

Solubility in water (%): Soluble.

Coefficient of water\oil dist.: Not available.

Section 4: FIRE & EXPLOSION DATA

Flammability: Not flammable.

Conditions of flammability: Surrounding fire.

Extinguishing media: As suitable for surrounding fire.

Special procedures: Wear a positive-pressure, self-contained breathing apparatus and full protective equipment.

Auto-ignition temperature (°C): Not applicable.

Flash point (°C), method: Not applicable.

**Lower flammability
limit (% vol):** Not applicable.

**Upper flammability
limit (% vol):** Not applicable.

Explosion Data

Sensitivity to static discharge: Not applicable.

Sensitivity to mechanical impact: Not applicable.

Hazardous combustion products: Iodine oxides.

Explosive power: Not applicable.

Section 5: REACTIVITY DATA

Chemical stability: Stable under normal conditions.

Conditions of instability: Extreme temperatures.
Extreme heat.

Hazardous polymerization: Not available.

Incompatible substances: Acids
Oxidizers.

**Hazardous decomposition
products:** See hazardous combustion products.

Section 6: TOXICOLOGICAL PROPERTIES

Route of entry: Ingestion and skin contact.

Effects of acute exposure

Eye contact: May cause irritation.

Skin contact: May cause irritation.

Inhalation: May be harmful if inhaled.

Ingestion: Irritant.
May cause gastro-intestinal irritation.

Effects of chronic exposure: Pre-existing eye and skin disorders may be aggravated by exposure to this product.

LD50 of product, species & route: Not available.

LC50 of product, species & route: Not available.

Exposure limit of material: Not available.

Sensitization to product: Not available.

Carcinogenic effects: Not listed as a carcinogen.

Reproductive effects: Not available.

Teratogenicity: May affect the developing fetus.

Mutagenicity: Not available.

Synergistic materials: Not available.

Section 7: PREVENTATIVE MEASURES

Precautionary Measures

Gloves/Type:



General work gloves to minimize skin contact.

Respiratory/Type:



Wear a NIOSH approved respirator if TLV is exceeded.

Eye/Type:



Safety glasses.

Footwear/Type: Safety shoes per local regulations.

Clothing/Type:



Lab coat.

Other/Type: Eye wash facility should be in close proximity.
Emergency shower should be in close proximity.

Ventilation requirements: Provide sufficient mechanical ventilation to maintain exposure below TLV.

Leak/Spill: Absorb with inert material.
Wear appropriate protective equipment.
Place in a closed container for disposal.

Waste disposal: In accordance with municipal, provincial and federal regulations.

Handling procedures and equipment: Avoid breathing vapors/mists.
Use adequate ventilation.
Wear personal protective equipment appropriate to task.
Wash thoroughly after handling.
Avoid contact with skin, eyes and clothing.
Launder contaminated clothing prior to reuse.

Storage requirements: Keep out of direct sunlight.
Store in a cool and dry place.

Special shipping information: See transportation information.

Section 8: FIRST AID MEASURES

Skin contact: Remove contaminated clothing. Wash affected area with soap and water. Get medical attention.

Eye contact: Immediately flush with cool water for at least 20 minutes.
Hold eyelids apart to ensure flushing of entire eye surface.
Get medical attention.

Inhalation: Remove victim to fresh air.
If irritation occurs, consult a physician.

Ingestion: Never give anything by mouth to an unconscious person.
Drink a large amount of water.
Do not induce vomiting, seek immediate medical attention.

Additional information: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any inaccuracies.

Section 9: ADDITIONAL INFORMATION

General note: This material safety data sheet was prepared from information obtained from various sources, including product suppliers and the Canadian Center for Occupational Health and Safety.

Data prepared by: Lowry & Associates, div. of Chem–Aquascience, Inc
Canadian Master Distributors for Taylor Technologies, Inc.
4–1151 Gorham Street
Newmarket, ON.
L3Y 8Y1
Tel: 905–836–0505
Fax: 905–895–4539.

Supplier MSDS date: 2012/06/07.

This MSDS was generated by *Conform–Plus* Application Service. Visit us at www.netmsds.com.

SULFURIC ACID .12N

Product: CR-0009

Section 1: PRODUCT INFORMATION

Chemical family: Inorganic acid solution.

Product uses: Chemical.

Supplier: Lowry & Associates, div. of Chem-Aquascience, Inc
Canadian Master Distributors for Taylor Technologies, Inc.
4-1151 Gorham Street
Newmarket, ON.
L3Y 8Y1
Tel: 905-836-0505
Fax: 905-895-4539.

Emergency Phone Number: Canutec 613-996-6666.

Manufacturer: Taylor Technologies Inc.
31 Loveton Circle
Sparks, MD USA 21152
Tel: 410-472-4340.

TDG classification: Not regulated.

WHMIS classification:

D2B



DSL status: The substance(s) listed in section 2 appear on the Domestic Substances List.

Product name: Sulfuric Acid .12N.

Section 2: HAZARDOUS INGREDIENTS

C.A.S.	CONCENTRATION %	Ingredient Name	T.L.V.	LD/50	LC/50
7664-93-9	<1	SULFURIC ACID	0.2 MG/M3	2140 MG/KG RAT ORAL	510 MG/M3/2H RAT INHALATION 320 MG/M3/2H MOUSE INHALATION

Section 2A: ADDITIONAL INGREDIENT INFORMATION

Note: Balance: Water (CAS# 7732-18-5).
(supplier).

Section 3: PHYSICAL DATA

Physical state: Liquid.

Appearance & odor: Odourless.
Clear, colourless.

Odor threshold (ppm): Not available.

Vapour pressure (mmHg): 17

Vapour density (air=1): .6

Volatiles (%)

By volume: 100

**Evaporation rate
(butyl acetate = 1):** Not available.

Boiling point (°C): 100

Freezing point (°C): Not available.

pH: 1.3

Specific gravity @ 20 °C: 1

Solubility in water (%): Soluble.

Coefficient of water\oil dist.: Not available.

Section 4: FIRE & EXPLOSION DATA

Flammability: Not flammable.

Conditions of flammability: Surrounding fire.

Extinguishing media: Dry chemical.
Carbon dioxide.

Special procedures: Wear a positive-pressure, self-contained breathing apparatus and full protective equipment.

Auto-ignition temperature (°C): Not applicable.

Flash point (°C), method: Not applicable.

**Lower flammability
limit (% vol):** Not applicable.

**Upper flammability
limit (% vol):** Not applicable.

Explosion Data

Sensitivity to static discharge: Not applicable.

Sensitivity to mechanical impact: Not applicable.

Hazardous combustion products: Oxides of sulfur (SO_x).
Hydrogen gas when in contact with metals.

Explosive power: Not applicable.

Section 5: REACTIVITY DATA

Chemical stability: Stable under normal conditions.

Conditions of instability: Contact with water.
Extreme temperatures.
Extreme heat.

Hazardous polymerization: Not available.

Incompatible substances: Strong alkalis.
Metals.

Hazardous decomposition products: See hazardous combustion products.

Section 6: TOXICOLOGICAL PROPERTIES

Route of entry: Ingestion and skin contact.

Effects of acute exposure

Eye contact: Irritant.
May cause burns.

Skin contact: Irritant.
May cause burns.

Inhalation: May be harmful if inhaled.

Ingestion: May cause gastro-intestinal irritation.

Effects of chronic exposure: Pre-existing eye and skin disorders may be aggravated by exposure to this product.

LD50 of product, species & route: Not available for mixture, see the ingredients section.

LC50 of product, species & route: Not available for mixture, see the ingredients section.

Exposure limit of material: Not available for mixture, see the ingredients section.

Sensitization to product: Not available.

Carcinogenic effects: Not listed as a carcinogen.

Reproductive effects: Not available.

Teratogenicity: Not available.

Mutagenicity: Not available.

Synergistic materials: Not available.

Section 7: PREVENTATIVE MEASURES

Precautionary Measures

Gloves/Type:



General work gloves to minimize skin contact.

Respiratory/Type:



Wear a NIOSH approved respirator if TLV is exceeded.

Eye/Type:



Safety glasses.

Footwear/Type: Safety shoes per local regulations.

Clothing/Type:



Lab coat.

Other/Type: Eye wash facility should be in close proximity.
Emergency shower should be in close proximity.

Ventilation requirements: Provide sufficient mechanical ventilation to maintain exposure below TLV.

Leak/Spill: Absorb with inert material.
Wear appropriate protective equipment.
Neutralize with soda ash.
Place in a closed container for disposal.

Waste disposal: In accordance with municipal, provincial and federal regulations.

Handling procedures and equipment: Avoid breathing vapors/mists.
Use adequate ventilation.
Wear personal protective equipment appropriate to task.
Wash thoroughly after handling.
Avoid contact with skin, eyes and clothing.
Launder contaminated clothing prior to reuse.

Storage requirements: Keep out of direct sunlight.
Store in a cool and dry place.

Special shipping information: See transportation information.

Section 8: FIRST AID MEASURES

Skin contact: Remove contaminated clothing. Wash affected area with soap and water. Get medical attention.

Eye contact: Immediately flush with cool water for at least 20 minutes.
Hold eyelids apart to ensure flushing of entire eye surface.
Get medical attention.

Inhalation: Remove victim to fresh air.
If irritation occurs, consult a physician.

Ingestion: Never give anything by mouth to an unconscious person.
Drink a large amount of water.
Do not induce vomiting, seek immediate medical attention.

Additional information: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any inaccuracies.

Section 9: ADDITIONAL INFORMATION

General note: This material safety data sheet was prepared from information obtained from various sources, including product suppliers and the Canadian Center for Occupational Health and Safety.

Data prepared by: Lowry & Associates, div. of Chem–Aquascience, Inc
Canadian Master Distributors for Taylor Technologies, Inc.
4–1151 Gorham Street
Newmarket, ON.
L3Y 8Y1
Tel: 905–836–0505
Fax: 905–895–4539.

Supplier MSDS date: 2012/06/07.

This MSDS was generated by *Conform–Plus* Application Service. Visit us at www.netmsds.com.

MATERIAL SAFETY DATA SHEET

I. IDENTITY:

Label Name: **Cramer Tuf-Skin (colorless and original)**
Item Numbers: 204027, 204028, 204033, 203531

Date Prepared: **4/12/2013**

Chemical Name and Synonyms: N/A
Chemical Family: Mixture
Manufacturer: Cramer Products, Inc.
153 West Warren
Gardner, KS 66030

Package type: Aerosol

Emergency Telephone No.
(913) 856-7511

II. HAZARDOUS INGREDIENTS:

Hazardous Components	CAS #	OSHA- PEL	ACGIH- TLV	%
Hydrocarbon Propellant		1000 ppm	1000 ppm	>25%
Isobutane	75-28-5			
Propane	74-98-6			
n-Butane	106-97-8			
Isopropyl Alcohol	67-63-0	400 ppm	400 ppm	>45%

III. PHYSICAL CHARACTERISTICS:

Boiling Point: N/A
Vapor Pressure: ~50 psig (in aerosol can)
Vapor Density: (Air=1): <1
Evaporation Rate: ~2.3 (liquid contents; Butyl Acetate =1)
Appearance and Odor: Clear spray with alcohol odor and sticky residue.

Specific Gravity (Water=1): N/A
Melting Point: N/A
Percent Volatile by Volume: >85%
Solubility in Water: partial

IV. FIRE AND EXPLOSION HAZARD:

Flash Point: -50°F closed cup
Extinguishing Media: Dry chemical or carbon dioxide

Flammable Limits: Lel Uel
(Isopropyl Alcohol) 2 12

Special Fire Fighting Procedures: This is an aerosol product. Use procedures for flammable aerosols.
Unusual Fire and Explosion Hazards: Contents are flammable and under pressure: if released would add to fire intensity. Rupturing containers may become projectiles.

V. REACTIVITY DATA:

Stability: stable
Incompatibility to Avoid: Anhydrides, isocyanates, organometallics, oxygen, and oxidizers
Hazardous Decomposition Byproducts: Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide
Hazardous Polymerization: will not occur

Conditions to Avoid: Avoid heat, sparks, open flame
Conditions to Avoid: None known

VI. HEALTH HAZARD DATA:

Effects of acute overexposure for: Isopropyl Alcohol

Eyes: Can cause severe irritation, redness, tearing, blurred vision

Skin: Prolonged or repeated contact can cause moderate irritation, defatting, dermatitis.

Breathing: Excessive inhalation of vapors can cause nasal and respiratory irritation, headache, possible unconsciousness, and even death.

Swallowing: Can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Effects of chronic overexposure: Isopropyl Alcohol has been found to cause damage to the liver, kidneys and brains of laboratory animals.

Emergency and First Aid Procedures:

If in eyes: Flush with large amounts of water. Cautiously attempt to lift upper and lower lids occasionally; get medical attention immediately.

If on skin: Thoroughly wash exposed area with soap and water.

If breathed: Remove to fresh air; administer oxygen. Consult physician immediately.

If swallowed: Immediately drink two glasses of water and induce vomiting. Get medical attention immediately.

VII. PRECAUTIONS FOR SAFE HANDLING AND USE:

Spills: Eliminate all sources of ignition. Spills should be collected for disposal.

Waste Disposal: Dispose of product in accordance with applicable local, county, state and federal regulations.

Handling and Storage: Product is an aerosol. Do not use near fire, flame or hot surfaces. Do not puncture or incinerate. Do not expose to heat or store at temperatures above 120° F. Keep out of reach of children.

VIII. CONTROL MEASURES:

Respiratory Protection: None required in normal use. As with all sprays, breathing mist should be avoided.

Ventilation: Use in well ventilated area.

Protective Gloves: None required

Eye Protection: Not required

Protective Clothing or Equipment: None required

IX. OTHER INFORMATION:

NFPA Hazard Ratings: Health 1; Flammability 3; Reactivity 1

Abbreviation Key: **N/A** = Not Applicable; **Lel** = Lower explosive limit; **Uel** = Upper explosive limit

The information contained herein is believed to be accurate. It is the user's obligation to determine the safe use of the product.



SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

SECTION 1: Identification

Product identifier	
Product name	Cyanuric Acid Reagent
Product number	R-0013
Recommended use and restrictions	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
Manufacturer	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

SECTION 2: Hazard(s) identification

Physical hazards	Not applicable
Health hazards	Not applicable
Environmental hazards	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
Label elements	
Hazard pictograms	Not applicable
Signal word	Not applicable
Hazard statements	Not applicable
Precautionary statements	
Prevention	Avoid contact with skin, eyes, or clothing. For contact with skin or eyes, flush 20 minutes with water. If ingested, contact physician or local poison control center. Treat symptoms as needed.
Response	This reagent is not defined as a hazardous chemical per OSHA's Hazard Communication Standard 2012; however, use care when handling.
Storage	Keep tightly capped. Store out of direct sunlight between 36°F–85°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazards not otherwise classified	Not applicable

SECTION 3: Composition/information on ingredients

Mixture			
Chemical name	Common name and synonyms	CAS number	% w/w
Water	Dihydrogen oxide	7732-18-5	80-100
Nonhazardous and other components below reportable levels	Not applicable	Not applicable	1-5

SECTION 4: First-aid measures

If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

If swallowed

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice/attention.

Most important symptoms and effects, both acute and delayed

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects

Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5: Firefighting measures**Extinguishing media**

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.
 Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Specific hazards arising from the substance or mixture

Fire hazard Not flammable
 Explosion hazard Not explosive
 Reactivity Hazardous reactions will not occur under normal conditions.
 Hazardous combustion products Carbon oxides, nitrogen oxides, sodium oxides. Other irritating fumes and smoke.

Advice for firefighters

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.
 Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.
 Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.
 Other information Refer to section 9 of the SDS for flammability properties.

SECTION 6: Accidental release measures**Personal precautions, protective equipment, and emergency procedures**

Wear appropriate protective equipment and clothing during cleanup. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

Environmental precautions

Avoid discharge into drains, watercourses, or onto the ground.

Methods and material for containment and cleaning up

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Reference to other sections

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

SECTION 7: Handling and storage**Personal precautions, protective equipment, and emergency procedures**

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

Conditions for safe storage, including any incompatibilities

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

SECTION 8: Exposure controls/personal protection**Occupational exposure limits**

Not regulated

US NIOSH: Pocket Guide to Chemical Hazards

Not regulated

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Not regulated

Biological limit values

No biological exposure limits noted for the ingredient(s)

Exposure controls

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.
Personal protective equipment	
Eye/face protection	Wear appropriate chemical safety goggles if contact is likely to occur.
Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Clear, colorless or nearly colorless
Odor	Odorless
Odor threshold	No data available
pH	5.8
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	No data available
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

SECTION 10: Stability and reactivity

Reactivity	Hazardous reactions will not occur under normal conditions.
Chemical stability	Stable under recommended handling and storage conditions (refer to section 7 of the SDS)
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use
Conditions to avoid	Contact with incompatible materials. Do not use in areas without adequate ventilation.
Incompatible materials	Acetaldehyde, acids, chlorine, ethylene oxide, isocyanates, metals, organic materials, peroxides, phenols, reducing agents, strong bases, strong oxidizing agents
Hazardous decomposition products	Hazardous reactions will not occur under normal conditions

SECTION 11: Toxicological information

Information on toxicological effects

Likely routes of exposure are skin/eye contact and ingestion.

Most important symptoms/effects, acute and delayed

Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching.

Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Acute toxicity

This product is not classified as an acute toxicity hazard.

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory sensitization

No data available

Skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

US National Toxicology Program (NTP) Report on Carcinogens

Not regulated

Reproductive toxicity

No data available

Specific target organ toxicity (single exposure)

No data available

Specific target organ toxicity (repeated exposure)

No data available

Aspiration hazard

No data available

SECTION 12: Ecological information

Ecotoxicity

This product is not classified as environmentally hazardous.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Large or frequent spills can have a harmful or damaging effect on the environment.

SECTION 13: Disposal considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

DOT

Not regulated as dangerous goods

IATA

Not regulated as dangerous goods

IMDG

Not regulated as dangerous goods

SECTION 15: Regulatory information

US federal regulations

CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

SARA 304 Emergency Release Notification

Not regulated

SARA 311/312 Hazardous Chemical

Not regulated

SARA 313 (TRI reporting)

Not regulated

TSCA Section 8(b) Chemical Inventory

All components are on the U.S. EPA TSCA Inventory list.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)

Not regulated

Safe Drinking Water Act (SDWA)

Not regulated

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

Not regulated

Massachusetts Right-to-Know Act

Not regulated

New Jersey Worker and Community Right-to-Know Act

Not regulated

Pennsylvania Worker and Community Right-to-Know Act

Not regulated

Rhode Island Right-to-Know Act

Not regulated

SECTION 16: Other information

NFPA Rating

Health hazard	0
Fire hazard	0
Reactivity	0
Specific	N/A

Disclaimer

The information in the Safety Data Sheet is offered for your consideration and guidance for safe handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

License granted to make unlimited paper copies for internal use only. This Safety Data Sheet may not be altered in any way without the expressed knowledge and permission of Taylor Technologies, Inc. The information contained in this sheet is based on lab experience and the most current data available.

Issue date:

May 2015

Last revisions

April 2018

ESCA TECH INC -- D-LEAD SKIN CLEANSER & BODY SOAP -- 8520-00F031473

=====
Product Identification
=====

Product ID:D-LEAD SKIN CLEANSER & BODY SOAP
MSDS Date:01/24/1991
FSC:8520
NIIN:00F031473
MSDS Number: BSNMJ
=== Responsible Party ===
Company Name:ESCA TECH INC
Address:4860 N HOPKINS ST
City:MILWAUKEE
State:WI
ZIP:53209
Country:US
Info Phone Num:414-461-1129/FAX 414-461-7123
Emergency Phone Num:414-461-1129
CAGE:ESCAT
=== Contractor Identification ===
Company Name:ESCA TECH INC
Address:4860 N HOPKINS ST
City:MILWAUKEE
State:WI
ZIP:53209
Country:US
Phone:414-461-1129/FAX 414-461-7123
CAGE:ESCAT

=====
Composition/Information on Ingredients
=====

Ingred Name:ANIONIC SURFACTANT

=====
Hazards Identification
=====

Routes of Entry: Inhalation:NO Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:PROLONGED SKIN EXPOSURE CAN DE-FAT THE
SKIN. EYES: MAY CAUSE TEMPORARY DISCOMFORT.
Explanation of Carcinogenicity:NONE

=====
First Aid Measures
=====

First Aid:SKIN: RINSE W/WATER. IF EXPOSED TO LENGTHY TIMES, USE HAND
CREAM. EYES: FLUSH W/WATER, LIFTING LIDS. INGESTION: TREAT AS
DETERGENT. OBTAIN MEDICAL ATTENTION IN ALL CASES.

=====
Fire Fighting Measures
=====

Flash Point:NONE
Fire Fighting Procedures:NONE REQUIRED, MATERIAL IS NOT FLAMMABLE.

=====
Accidental Release Measures
=====

Spill Release Procedures:STOP LEAK AT SOURCE. FLUSH FLOOR W/WATER.
RINSE AREA OF SPILLAGE.

=====
===== Handling and Storage =====

Handling and Storage Precautions:STORE >32F. IF FROZEN, IT WILL THAW
W/OUT ADVERSE EFFECT. KEEP OUT OF EXTREME HEAT. GENERALLY STORED AT
TEMPS 40-90F, OUT OF DIRECT SUNLIGHT.

=====
===== Exposure Controls/Personal Protection =====

Eye Protection:REQUIRED
Work Hygienic Practices:IF CLOTHING IS WET FROM SOAP, REMOVE & WASH.
USE GOOD HYGIENIC PRACTICES.
Supplemental Safety and Health

=====
===== Physical/Chemical Properties =====

Boiling Pt:B.P. Text:210F
Vapor Pres:17
Vapor Density:>1
Spec Gravity:1.05
pH:8-8.5
Evaporation Rate & Reference:SLOWER THAN BU AC
Solubility in Water:COMPLETE
Appearance and Odor:PINK MOBILE LIQUID W/PLEASANT HONEY ALMOND
FRAGRANCE

=====
===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES
Stability Condition to Avoid:TEMPS <32F, EXTREME HEAT, DIRECT SUNLIGHT

=====
===== Disposal Considerations =====

Waste Disposal Methods:WASH SPILLS DOWN DRAIN OR SOAK UP IN ABSORPTIVE
MEDIA & DEPOSIT IN WASTE CAN. AFTER USE, SOAP SOLUTION WILL CONTAIN
DISSOLVED HEAVY METALS. DISCHARGE WASTE WATER IN ACCORDANCE
W/LOCAL/STATE/FED REGS & IN ACCORDANCE W/ALL WATER DISCHARGE
PERMITS.

Disclaimer (provided with this information by the compiling agencies):
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of Defense. The United States of America in no manner whatsoever,
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disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.

MATERIAL SAFETY DATA SHEET

A05525
02 00

DATE OF PREPARATION
Nov 29, 2010

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

A05525

PRODUCT NAME

SS Cleaner

MANUFACTURER'S NAME

THE SHERWIN-WILLIAMS CO.
Diversified Brands
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 777-2966
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300

*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure	
9	74-98-6	Propane	ACGIH TLV OSHA PEL	2500 PPM 1000 PPM	760 mm
21	106-97-8	Butane	ACGIH TLV OSHA PEL	800 PPM 800 PPM	760 mm
40	64742-47-8	Aliphatic Solvent	ACGIH TLV OSHA PEL	Not Available Not Available	0.1 mm
30	64742-52-5	Heavy Naphthenic Petroleum Oil	ACGIH TLV OSHA PEL	Not Available Not Available	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.

SKIN: Prolonged or repeated exposure may cause irritation.

INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

HMIS Codes

Health	2
Flammability	4
Reactivity	0

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and laundry before re-use.

INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	EXTINGUISHING MEDIA
Propellant < 0 °F	1.3	9.5	Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Containers may explode when exposed to extreme heat.

Application to hot surfaces requires special precautions.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Available

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits.

Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

PROTECTIVE GLOVES

None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	6.06 lb/gal	726 g/l
SPECIFIC GRAVITY	0.73	
BOILING POINT	<0 - 495 °F	<-18 - 257 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	75%	
EVAPORATION RATE	Faster than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)		
	Volatile Weight 70.00%	Less Water and Federally Exempt Solvents

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
74-98-6	Propane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
106-97-8	Butane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
64742-47-8	Aliphatic Solvent	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
64742-52-5	Heavy Naphthenic Petroleum Oil	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

US Ground (DOT)

May be classed as Consumer Commodity, ORM-D

UN1950, AEROSOLS, 2.1, LIMITED QUANTITY, (ERG#126)

Canada (TDG)

May be classed as Consumer Commodity, ORM-D

UN1950, AEROSOLS, CLASS 2.1, LIMITED QUANTITY, (ERG#126)

IMO

May be shipped as Limited Quantity
 UN1950, AEROSOLS, CLASS 2.1, LIMITED QUANTITY, EmS F-D, S-U, ADR (D)

SECTION 15 — REGULATORY INFORMATION
--

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
---------	-------------------	---------	-----------

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

CALIFORNIA PROPOSITION 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

<p>The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.</p>
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Dust-Off Compressed Gas Duster

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue: 10/15/2015

Revision date: 5/15/2018

Version: 2.0

SECTION 1: Identification

1.1. Product identifier

Substance name : Dust-Off Compressed Gas Duster
Product code : 3.5 oz., 7 oz., 10 oz., Professional 12 oz., Jumbo 17 oz., Classic and Plus

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Dust Removal

1.3. Details of the supplier of the safety data sheet

Falcon Safety Products, Inc.
25 ImClone Drive
Branchburg, NJ 08876 - USA
T (908) 707-4900

1.4. Emergency telephone number

Emergency number : (800) 498-7192

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

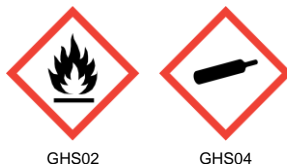
GHS-US and GHS-CA classification

Flam. Aerosol 2
Press. Gas (Liquified Gas)

2.2. Label elements

GHS-US and GHS-CA labelling

Hazard pictograms (GHS-US/GHS-CA) :



Signal word (GHS-US/GHS-CA) : Warning
Hazard statements (GHS-US/GHS-CA) : Flammable aerosol. Contains gas under pressure; may explode if heated.
Precautionary statements (GHS-US/GHS-CA) : Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

2.3. Other hazards

Do not store in enclosed vehicle.

2.4. Unknown acute toxicity (GHS US/GHS CA)

Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substance

Name	Product identifier	%
1,1-Difluoroethane	(CAS No) 75-37-6	100

3.2. Mixture

Not applicable.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists. May cause frostbite.

Dust Off Compressed Gas Duster

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

- | | |
|--------------------------------------|---|
| First-aid measures after eye contact | : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention. |
| First-aid measures after ingestion | : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell. |

4.2. Most important symptoms and effects, both acute and delayed

- | | |
|--------------------------------------|---|
| Symptoms/injuries after inhalation | : May cause respiratory tract irritation. May cause drowsiness, dizziness and central nervous system depression. |
| Symptoms/injuries after skin contact | : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite on contact with the liquid. |
| Symptoms/injuries after eye contact | : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact with the liquid. |
| Symptoms/injuries after ingestion | : Not a normal route of exposure. |

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- | | |
|--------------------------------|---|
| Suitable extinguishing media | : Water spray, water fog, dry chemical, alcohol resistant foam, carbon dioxide. |
| Unsuitable extinguishing media | : None known. |

5.2. Special hazards arising from the substance or mixture

- | | |
|------------------|--|
| Fire hazard | : Flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon, hydrofluoric acid, carbonyl fluoride. |
| Explosion hazard | : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. |

5.3. Advice for firefighters

- | | |
|--------------------------------|---|
| Firefighting instructions | : DO NOT fight fire when fire reaches explosives. Evacuate area. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors. |
| Protection during firefighting | : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- | | |
|------------------|---|
| General measures | : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. |
|------------------|---|

6.2. Methods and material for containment and cleaning up

- | | |
|-------------------------|--|
| For containment | : Ventilate the area thoroughly, especially low lying areas (basements, workpits etc). |
| Methods for cleaning up | : Leave the product to evaporate. Provide ventilation. |

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- | | |
|-----------------------------------|--|
| Additional hazards when processed | : Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use. Keep away from sources of ignition - No smoking. |
| Precautions for safe handling | : Do not spray on an open flame or other ignition source. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Provide local exhaust or general room ventilation. When using do not eat, drink or smoke. Prevent the build-up of electrostatic charge. Use non-sparking tools. |
| Hygiene measures | : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking. |

7.2. Conditions for safe storage, including any incompatibilities

- | | |
|--------------------|--|
| Technical measures | : Proper grounding procedures to avoid static electricity should be followed. |
| Storage conditions | : Keep out of the reach of children. Keep container dry and in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep in fireproof place. Store in original container. Do not store in enclosed vehicle. |

7.3. Specific end use(s)

Not available.

Dust Off Compressed Gas Duster

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1,1-Difluoroethane (75-37-6)	
ACGIH	Not applicable.
OSHA	Not applicable.
NIOSH	Not applicable.
IDLH	Not applicable.

8.2. Exposure controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand protection	: Wear suitable gloves.
Eye protection	: Safety glasses with side shields.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Clear
Color	: Colourless
Odor	: Slight, ether-like
Odor threshold	: No data available
pH	: Neutral
Melting point	: No data available
Freezing point	: No data available
Boiling point	: -13 °F (- 25 °C)
Flash point	: < 58 °F (<14.4 °C)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Flammable
Explosion limits	: 3.9-16.9
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: 5960 kPa at 77 °F (25 °C)
Relative density	: 0.91
Relative vapor density at 20 °C	: 2.4 at 77 °F (25 °C)
Specific gravity / density	: 0.9
Solubility	: Slightly
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available.

Dust Off Compressed Gas Duster

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions. Flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Heat. Incompatible materials. Sources of ignition. Do not expose to temperatures exceeding 50 °C/ 122 °F.

10.5. Incompatible materials

Alkali and alkaline earth metals. Powdered metals. Powdered metallic salts.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon, hydrofluoric acid, carbonyl fluoride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Dust Off Compressed Gas Duster	
LD50 oral rat	1500 mg/kg
LD50 dermal rabbit	No data available
LC50 inhalation rat	64000 ppm

Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitization	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation. May cause drowsiness, dizziness and central nervous system depression.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite on contact with the liquid.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact with the liquid.
Symptoms/injuries after ingestion	: Not a normal route of exposure.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Dust Off Compressed Gas Duster	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Dust Off Compressed Gas Duster	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Dust Off Compressed Gas Duster

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible. Container under pressure. Do not drill or burn even after use.
- Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

- In accordance with DOT
- UN-No. (DOT) : UN1030
- Proper Shipping Name (DOT) : 1,1-Difluoroethane
- Transport hazard class(es) (DOT) : 2.1
- Hazard labels (DOT) :



- Packaging Exceptions : Falcon Safety Products has been granted a DOT special permit. A copy of DOT Special Permit SP-11516 can be obtained by calling Falcon Safety Products, Inc. at 908-707-4900.

Transportation of Dangerous Goods (TDG)

- In accordance with TDG
- UN-No.(TDG) : UN1030
- Proper Shipping Name (TDG) : 1,1-Difluoroethane
- Class (TDG) : 2.1
- Hazard labels (TDG) :



- Packaging Exceptions : TDG Canada: Falcon Safety Products has been granted Equivalency Certificate SU 9211 (ren. 1) by the TCSS, TDGD to offer for transport by road, rail and marine.

Transport by sea

- UN-No. (IMDG) : UN1030
- Proper Shipping Name (IMDG) : 1,1-DIFLUOROETHANE (REFRIGERANT GAS R 152a)
- Class (IMDG) : 2.1

Air transport

- UN-No. (IATA) : UN1030
- Proper Shipping Name (IATA) : 1,1-Difluoroethane
- Class (IATA) : 2.1

Additional information

- Other information : No supplementary information available.
- Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

1,1-Difluoroethane (75-37-6)

Listed on the Canadian DSL (Domestic Substances List)

15.2. US State regulations

Dust Off Compressed Gas Duster

State or local regulations : This product does not contain a chemical known to the State of California to cause cancer,

Dust Off Compressed Gas Duster

Safety Data Sheet

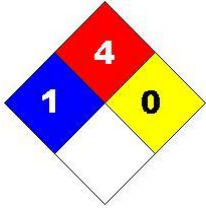
according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Dust Off Compressed Gas Duster	
	birth defects or other reproductive harm.

SECTION 16: Other information

Date of issue : 10/15/2015
Revision date : 5/15/2018
Other information : None.

Mexico Classification:



Blue = Health Red = Flammability Yellow = Reactivity White = Special

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

Section 1. Identification

Product name : Expo White Board Cleaner

Material uses : Cleaning solutions.

Manufacturer : Newell Rubbermaid
3500 Lacey Road, 10th Floor
Downers Grove, IL 60515
USA
800-323-0749 or 630-829-2500

Emergency telephone number (with hours of operation) : CHEMTREC (U.S. and Canada) 1-800-424-9300

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : Not applicable

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

General : Read label before use. If medical advice is needed, have product container or label at hand.

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
3-butoxypropan-2-ol	2 - 5	5131-66-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 3. Composition/information on ingredients

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Section 8. Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Clear.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Not available.
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : Not available.
- Solubility** : Not available.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- SADT** : Not available.
- Viscosity** : Not available.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
3-butoxypropan-2-ol	LD50 Dermal	Rabbit	3100 mg/kg	-

Irritation/Corrosion

No known significant effects or critical hazards.

Sensitization

No known significant effects or critical hazards.

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

No known significant effects or critical hazards.

Specific target organ toxicity (repeated exposure)

No known significant effects or critical hazards.

Aspiration hazard

No known significant effects or critical hazards.

Information on the likely routes of exposure : Not available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Section 11. Toxicological information

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Dermal	63798.6 mg/kg

Section 12. Ecological information

Toxicity

No known significant effects or critical hazards.

Persistence and degradability

No known significant effects or critical hazards.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
3-butoxypropan-2-ol	1.2	-	low

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b):** All components are listed or exempted.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
3-butoxypropan-2-ol	2 - 5	Yes.	No.	No.	Yes.	No.

California Prop. 65

This product does not contain Chemicals known to State of California to cause cancer, birth defects, or reproductive harm.

Canada

WHMIS (Canada) : Not controlled under WHMIS (Canada).

Canadian lists

Canadian NPRI : The following components are listed: Propylene glycol butyl ether

CEPA Toxic substances : None of the components are listed.

Canada inventory : All components are listed or exempted.

Section 16. Other information

History

Date of issue/Date of revision : 8/5/2015

Date of previous issue : No previous validation

Version : 1

Prepared by : Product Safety.

Section 16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
UN = United Nations

▣ Indicates information that has changed from previously issued version.

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.



The Procter & Gamble Company
P&G Household Care
Fabric & Home Care Innovation Center
5299 Spring Grove Avenue
Cincinnati, OH 45217-1087

MATERIAL SAFETY DATA SHEET

Issue Date: Mar 2014

SECTION I - PRODUCT IDENTIFICATION

Identity: AEROSOL AIR REFRESHER **Finished Product**
Brands: FEBREZE AIR EFFECTS (all scents, including seasonal scents)
P&G Telephone Number: 1-800-308-EASY (1-800-308-3279) or call Local Poison Control Center or your physician.
Emergency (24 hour) Telephone Number: CHEMTREC 1-800-424-9300 – in the U.S. and Canada 1-703-527-3887 - for calls originating elsewhere

SECTION II - HAZARDS IDENTIFICATION

Potential Health Hazards (Acute and Chronic): (See Section 11 for more information)
Ingestion: None
Eye Contact: Mild eye irritant
Skin: None
Inhalation: None
Signs and Symptoms of Exposure:
Ingestion: Possible mild gastrointestinal irritation with nausea, vomiting, and/or diarrhea.
Eye Contact: Do not spray toward face. If eye contact occurs, rinse well with water.
Skin Contact: Prolonged skin contact or instillation into the eye may result in transient, superficial effects similar to those produced by mild toilet soap.
Inhalation: Intentional misuse by deliberately concentrating and inhaling pressurized product may be harmful or fatal. Inhalation of high concentrations of ethanol vapor may cause irritation of the eyes and respiratory tract, drowsiness and fatigue.
Medical Conditions Generally Known to be Aggravated by Exposure: None
Potential Environmental Effects: (See Section 12 for more information)

SECTION III - COMPOSITION AND INGREDIENTS

Ingredients/Chemical Name: Water, alcohol, odor eliminator derived from corn, fragrance, non-flammable natural propellant, quality control ingredients. Contents under pressure with nitrogen.
Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200. and/or WHMIS under the HPA:

<u>Chemical Name</u>	<u>Common Name</u>	<u>CAS No.</u>	<u>Composition Range</u>	<u>LD50/LC50</u>
Ethanol	Alcohol	64-17-5	3-7%	7.06 g/kg rat, oral

SECTION IV – FIRST AID INFORMATION

First Aid Procedures:

Ingestion: Dilute with fluids and treat symptomatically.

Eye Contact: Rinse well with water for at least 15 minutes.

Skin Contact: Rinse with water.

Inhalation: Remove to fresh air.

Note to Physician: (if applicable)

Other: Consumer product package has the following precautionary statement:

US Product Package:

FRONT PANEL: **CAUTION: CONTENTS UNDER PRESSURE.** Read back panel carefully.

BACK PANEL: **CAUTION:** Intentional misuse by deliberately concentrating and inhaling pressurized product may be harmful or fatal. **KEEP OUT OF REACH OF CHILDREN.** Do not spray towards face. If eye contact occurs, rinse well with water. If irritation persists, get medical attention. Do not expose to heat or open flame or store at room temperatures above 120F. Dispose properly. Do not puncture or incinerate container.

Canadian Product Package:

FRONT PANEL: **CAUTION: CONTENTS UNDER PRESSURE.**

BACK PANEL: **CAUTION: CONTAINER MAY EXPLODE IF HEATED.** Do not puncture. Do not burn. Store away from heat. Some hard surfaces may become damp when sprayed. Avoid slips or falls. **KEEP OUT OF REACH OF CHILDREN.** Do not spray towards face. If eye contact occurs, rinse well with water.

SECTION V - FIRE FIGHTING INFORMATION

Flash Point (Method Used): 125-140°F (cc)/ 51.66- 60°C Although this product has a flashpoint below 200°F (closed cup), it is an aqueous solution (>50% water) that does **not** sustain combustion.

Aerosol was tested per the appropriate tests in the UN Manual of Tests and Criteria to classify as Aerosols 2.2.

Flammable Properties: Mixture and propellant are not flammable.

Upper Flammable Limit: N/A

Lower Flammable Limit: N/A

Explosive Limits: UEL: N/A LEL: N/A

Auto-ignition Temperature: N/K

Hazardous Combustion Products: N/K

Explosion Data (Sensitivity to Mechanical Impact): N/A

Explosion Data (Sensitivity to Static Discharge): N/A

Extinguishing Media:

Suitable: CO₂, water or dry chemical may be used.

Unsuitable: N/K

Protection of Firefighters:

Specific Hazards Arising from the Material: N/K

Protective Equipment and Precautions for Firefighters: Normal fire-fighting gear.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Personal Precautions: None

Environmental Precautions: Disposal is to be performed in compliance with federal, state/provincial and local regulations. Aerosol cans, when disposed as waste, are regulated as D003 reactive hazardous waste in some US states because of their potential to explode when heated. Check with your State/provincial environmental agency for guidance. Do not landfill liquid. Incinerate all expelled liquid.

Methods for Containment: Use water spray to dilute and/or wash away spills to avoid exposure and to protect persons working to stop/repair leak. Any spills are to be prevented from entering waterways. Sorbents may be used.

Methods for Cleanup: For individual cans, expel liquid, collect, incinerate, puncture container and send as scrap metal for recycling.

Other Information: (if applicable): N/A

SECTION VII – HANDLING AND STORAGE

Precautions For Safe Handling

For Household Setting: Keep out of reach of children. Do not expose to heat or open flame or store at room temperatures above 120F. Dispose properly. Do not puncture or incinerate container.

For Non – Household Setting: Avoid puncturing or otherwise damaging aerosol containers and packaging when using forklifts or other material handling equipment.

Conditions for Safe Storage: Do not expose to heat or flame.

For Household Setting: Pressurized container. Store at room temperature. Do not expose to temperatures above 43°C / 110°F.

For Non-Household Use: Pressurized container. Store at room temperature. Do not expose to temperatures above 43°C / 110°F. Store in accordance with local requirements for NFPA Aerosol Level 1 products.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Ethanol (CAS# 64-17-5) ACGIH-TLV 1000 ppm
OSHA Z-1 PEL 1000 ppm

Engineering Controls: N/A

Personal Protective Equipment (PPE):

Eye/Face Protection: None required for normal consumer use.

Industrial setting: If a splash of solution is likely, chemical goggles may be needed.

Skin Protection: None required for normal consumer use.

Industrial setting: Minimize skin contact with protective gloves (rubber or neoprene).

Respiratory Protection: None required with normal consumer use.

Industrial setting: Use ventilation to minimize exposure to vapor or mist (ethanol).

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance (color, physical form, shape): Clear liquid. **Flash Point (Method Used):** 125-140°F (cc)/ 51.66- 60°C. Although this product has a flashpoint below 200°F (closed cup), it is an aqueous solution (>50% water) that does **not** sustain combustion.

Odor: Perfume **Solubility in Water:** Soluble

Odor Threshold: N/A **Decomposition Temperature:** N/A

Physical State: liquid **Evaporation Rate (nBuOAc=1):** N/K

Vapor Pressure (mm Hg): N/A **Specific Gravity/Density (H₂O=1):** ~ 1.0

Vapor Density (Air=1): N/A **Melting/Freezing Point:** N/A

Boiling Point: 212°F / ~100°C **Reserve Alkalinity:** N/A

Partition Coefficient (n-octanol/water): N/A **pH (neat):** 4.0-5.0

pH (neat): 7.0 (Pet Odor Eliminator, Pure Refreshment and Clean Citrus)

Volatile Organic Compound (VOC): Product complies with State and Federal regulations for VOC content.

SECTION X - STABILITY AND REACTIVITY

Chemical Stability: Stable.

Conditions to Avoid: Avoid extreme heat.

Incompatible Materials: N/K

Hazardous Decomposition Products: N/K

Possibility of Hazardous Reactions: N/K

SECTION XI – TOXICOLOGICAL INFORMATION

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.
LD50 (rats oral) – estimated >5000 mg/kg

Chronic Effects: No chronic health effects reported.

Target Organs: No target organs reported.

Carcinogenicity: This finished consumer product is not carcinogenic.
NTP: No
IARC: No

SECTION XII - ECOLOGICAL INFORMATION

This product is intended for dispersive use. The ingredients do not pose a significant hazard to aquatic organisms and will not cause any long-term adverse effects in the environment at environmentally relevant concentrations. The container is compatible with municipal solid waste systems and will not pose a hazard to the environment when properly handled.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method: Disposal is to be performed in compliance with federal, state/provincial and local regulations. Aerosol cans, when disposed as waste, are regulated as D003 reactive hazardous waste in some States because of their potential to explode when heated. Check with your State/provincial environmental agency for guidance. Do not landfill liquid. Incinerate all expelled liquid.

Non-Household Setting (federal): For individual bottles, expel liquid, collect and incinerate. Puncture container and send as scrap metal for recycling.

Non-Household Setting (California): Hazardous, in accordance with 22 CCR 66261.20 through 22 CCR 66261.24

Household Use: Consumer may discard empty container in trash, or recycle where facilities exist.

SECTION XIV - TRANSPORT INFORMATION

Transportation Information – Products covered by this MSDS, in their original form, are regulated for transportation.

For finished packaged product transported by ground (US DOT): **Consumer Commodity ORM-D.**

For finished packaged product transported by sea (IMDG): **UN1950, Aerosols, 2.2**

For finished packaged product transported by air (IATA): **ID8000 Consumer Commodity, 9**

SECTION XV - REGULATORY INFORMATION

UNITED STATES - FEDERAL

All intentionally-added components of this product are listed on the US TSCA Inventory.

EPA Registration Number: Not Applicable

SARA chemicals: This product contains the following SARA 313/302/304/311/312 chemicals: NONE

STATES:

This product is not subject to warning labeling under California Proposition 65.

State Right-to-Know and CERCLA:

The following ingredients present in the finished product are listed on state right-to-know lists or state worker exposure lists:

Ingredient	CAS#	Level	States					CERCLA RQ
			IL	MA	NJ	PA	RI	
Ethanol	64-17-5	3-7%	X	X	X	X	X	100 lbs

Canada

All ingredients are CEPA approved for import to Canada by Procter & Gamble. This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and this MSDS contains all information required by the Controlled Products Regulations.

SECTION XVI - OTHER INFORMATION

Perfumes contained within the products covered by this MSDS comply with appropriate IFRA guidance.

P&G Hazard Rating:	Health:	1	4=EXTREME
	Flammability:	1	3=HIGH
	Reactivity:	0	2=MODERATE
			1=SLIGHT
			0=NOT SIGNIFICANT

*N/A. - Not Applicable

*N/K. - Not Known

Data supplied is for use only in connection with occupational safety and health.

DISCLAIMER: This MSDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations.

This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment. Procter & Gamble assumed no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the product.



SAFETY DATA SHEET

Issuing Date November 9, 2015

Revision Date August 8, 2017

Revision Number 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Formula 409® Multi-Surface Cleaner

Other means of identification

EPA Registration Number 5813-73

Recommended use of the chemical and restrictions on use

Recommended Use Multi-purpose spray cleaner and disinfectant

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

The Clorox Company
1221 Broadway
Oakland, CA 94612

Phone: 1-510-271-7000

Emergency telephone number

Emergency Phone Numbers For Medical Emergencies call: 1-800-446-1014
For Transportation Emergencies, call Chemtrec: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

This mixture is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation	Category 3
---------------------------	------------

GHS Label elements, including precautionary statements

Emergency Overview

Signal word	Warning
Hazard statements Causes mild skin irritation	No pictogram required.
Appearance Clear	Physical State Thin liquid
	Odor Floral, citrus

Precautionary Statements - Prevention

None

Precautionary Statements - Response

If skin irritation occurs: Get medical advice.

Precautionary Statements - Storage

None

Precautionary Statements - Disposal

None

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

0.2% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Very toxic to aquatic life with long-lasting effects.

Interactions with Other Chemicals

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Lauramine oxide	1643-20-5	0.5 - 1.5	*
n-Alkyl (40% C12, 50% C14, 10% C16) dimethyl benzyl ammonium chloride	68424-85-1	0.2 - 0.4	*

* The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES**First aid measures**

General Advice	Show this safety data sheet to the doctor in attendance.
Eye Contact	Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin Contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Inhalation	Move to fresh air. If breathing is affected, call a doctor.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glassful of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects Mild irritation of eyes and skin.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

No information available

Explosion Data

Sensitivity to Mechanical Impact None

Sensitivity to Static Discharge None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with eyes and skin.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental Precautions See Section 12 for additional ecological information

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin, and clothing. Do not eat, drink, or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool, and well-ventilated place.

Incompatible Products None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lauramine oxide 1643-20-5	None	None	None
n-Alkyl (40% C12, 50% C14, 10% C16) dimethyl benzyl ammonium chloride 68424-85-1	None	None	None

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection	If splashes are likely to occur, wear safety glasses with side-shields. None required for consumer use.
Skin and Body Protection	No special protective equipment required.
Respiratory Protection	If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene Measures	Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes, or clothing. Do not eat, drink, or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Thin liquid		
Appearance	Clear	Odor	Floral, citrus
Color	Clear	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	9 - 11.5	None known
Melting/freezing point	No data available	None known
Boiling Point/Range	No data available	None known
Flash Point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	~1.0	None known
Water Solubility	Soluble in water.	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive Properties	Not explosive	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

None known.

Incompatible materials

None known.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation	Exposure to vapor or mist may irritate respiratory tract.
Eye Contact	May cause eye irritation.
Skin Contact	Prolonged contact may cause irritation.
Ingestion	Ingestion may cause irritation to mucous membranes and gastrointestinal irritation, nausea, vomiting, and diarrhea.

Information on toxicological effects

Symptoms May cause redness and tearing of the eyes and skin redness.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.
Mutagenic Effects	No information available.
Carcinogenicity	Contains no ingredient listed as a carcinogen.
Reproductive Toxicity	No information available
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic Toxicity	No known effect.
Target Organ Effects	Respiratory system, eyes, skin, gastrointestinal tract (GI).
Aspiration Hazard	No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document Not applicable.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose of in accordance with all applicable federal, state, and local regulations.

Contaminated Packaging

Do not reuse empty containers. Dispose of in accordance with all applicable federal, state, and local regulations.

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.
DSL/NDSL	All components are on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION: Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Avoid contact with foods.

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Ethanolamine 141-43-5	X	X	X	-	X

International Regulations**Canada****WHMIS Hazard Class**

D2B Toxic Materials



16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 1	Flammability 0	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health Hazard 1	Flammability 0	Physical Hazard 0	Personal Protection B

Prepared By Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Preparation Date November 9, 2015

Revision Date August 8, 2017

Revision Note Removal of dye.

Reference XXXXXXXX/166962.001

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet

Material Safety Data Sheet



Section 1: PRODUCT AND COMPANY IDENTIFICATION

Vi-Jon Incorporated
8515 Page Avenue
Saint Louis, MO 63114

Phone: 314-427-1000
In Case of Spill Emergency Contact:
Chemtrec: 1-800-424-9300

Product Name: Germ-X Hand Sanitizer

Product Code: 028

Product Use: Hand Sanitizer

Issue Date: 04/23/2008

Supersedes Date: July 2007

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Keep out of reach of children.

Appearance/Odor: Clear gel with alcohol/citrus odor.

WARNING:

Flammable (ethyl alcohol and isopropyl alcohol)

Target (ethyl alcohol and isopropyl alcohol) respiratory system, skin, eyes, CNS, liver, blood and reproductive system.

Potential Health Effects: See Section 11 for more information.

Symptoms of Exposure:

Inhalation: May cause irritation of the respiratory tract.

Ingestion: May cause nausea, vomiting and diarrhea.

Eyes: May cause irritation to the eyes.

Skin: None expected.

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

This material contains components that are considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Environmental Effects: See Section 12 for more information.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS#	% by Wt.
Ethyl Alcohol	64-17-5	59%
Isopropyl Alcohol	67-64-0	3%

Section 4: FIRST AID MEASURES

Emergency first aid procedures by route of exposure:

- Inhalation:** If symptoms are experienced, remove source of contamination or move victim to fresh air. If affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- Ingestion:** Do not induce vomiting. If the material is swallowed, get medical attention or advice.
- Skin:** If irritation is experienced, flush with water. If irritation persists, get medical attention.
- Eyes:** Immediately flush eyes with water for at least 15 minutes while holding eyelids open. If symptoms persist, get medical attention.

Section 5: FIRE FIGHTING MEASURES

Flash Point: 71°F (21.6°C)

Method Used: ASTM D-93

Lower Flammable Limit: 3.3 (Volume % in air)

Upper Flammable Limit: 19.0 (Volume % in air)

Auto Ignition: (Ethyl Alcohol) 363°C

Flammability Classification: Flammable Liquid IB

Extinguishing Media: Use methods appropriate for the surrounding fire. Consider water spray or fog, carbon dioxide, dry chemical powder, or alcohol resistant foam.

Products of Combustion: Upon decomposition this product may emit carbon dioxide, carbon monoxide and/or low molecular weight hydrocarbons.

Fire Fighting Equipment/Instructions: Wear protective clothing and equipment suitable for the surrounding fire, including helmet, facemask, and self contained breathing apparatus.

NFPA Rating: Health:2 Fire: 3 Reactivity:0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: For large spills wear gloves, safety glasses and when levels exceed OSHA PEL use appropriate NIOSH approved respiratory protection. Keep unnecessary personnel away. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

Environmental Precautions: Prevent discharge to open waters.

Method for Containment: Absorb spilled liquid in suitable non-flammable inert material such as clay, vermiculite or diatomaceous earth.

Methods for Clean-Up: Ventilate area of leak or spill. Use spark-proof tools to sweep or scrape up and containerize in approved chemical waste container. Wash spill area with water.

Section 7: HANDLING AND STORAGE

Handling: Keep away from heat, sparks and flame. Prevent contact with eyes. Avoid inhalation.

Storage: Keep the container tightly closed and in a cool, well ventilated place.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Ethyl Alcohol (64-17-5)

ACGIH: 1,000 ppm TWA
OSHA: 1,000 ppm TWA; 1,900 mg/m³ TWA

Isopropyl Alcohol (67-63-0)

ACGIH: 200 ppm TWA
OSHA: 400 ppm TWA; 980 mg/m³ TWA

Engineering Controls: Normal room ventilation is usually adequate under normal use.

Personal Protective Equipment (PPE)

Eye/Face Protection: None needed under normal use.

Skin Protection: None needed under normal use.

Respiratory Protection: None needed under normal use.

General Hygiene Considerations: None needed under normal use.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Color: Clear Translucent

Odor: Alcohol/Citrus

Physical State: Gel

pH: Not Available.

Vapor Density: (Ethyl Alcohol) 1.6

Boiling Point: (Ethyl Alcohol) 78.5°C

Vapor Pressure: (Ethyl Alcohol) 57.3 hPa at 20°C

Melting Point: (Ethyl Alcohol) -114.1°C

Freezing Point: Not Available

Flash Point (see section 5)

Flammability Properties (see section 5)

Solubility (in water): Soluble

Specific Gravity @ 25°C: 0.88-0.92

Evaporation Rate: Not Available

Octanol/Water partition coefficient (K_{ow}): (Ethyl Alcohol): - 0.32

Auto-ignition temperature: (Ethyl Alcohol) 363°C

Decomposition temperature: Not Available

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal ambient temperatures 70°C (21°C)

Condition to Avoid: Avoid excessive heat or sources of ignition.

Incompatible Materials: This product reacts with strong acid, strong bases, and oxidizing agents.

Hazardous Decomposition: upon decomposition, this product evolves carbon monoxide, carbon dioxide, and/or low weight hydrocarbons.

Hazardous Reactions: Hazardous polymerization will not occur.

Section 11: TOXICOLOGY INFORMATION

ACUTE EFFECTS:

A: General Product information

Product contains ethyl alcohol and isopropyl alcohol.

B: Component Analysis LD50

Ethyl Alcohol (64-17-5)
Oral LD50 Rat: 7060 mg/kg

Isopropyl Alcohol (67-63-0)
Inhalation LC50 Rat: 72.6 mg/L/4H
Oral LD50 Rat: 4396 mg/kg
Dermal LD50 Rat: 12800 mg/kg
Dermal LD50 Rabbit: 12870 mg/kg

CHRONIC EFFECTS:

Component

Ethyl Alcohol (64-17-5)
Carcinogenicity: ACGIH A4 – Not Classifiable as a Human Carcinogen
Neurotoxicity: This product contains ethyl alcohol, a central nervous system target.
Mutagenicity: No information available for product.
Reproductive: No information available for product.
Developmental: Ethyl alcohol is a developmental toxin when consumed during pregnancy.
Target Organs: When consumed, ethyl alcohol can target the respiratory system, skin, eyes, CNS, liver, blood and reproductive system.

Isopropyl Alcohol (67-63-0)
Carcinogenicity: ACGIH A4 – Not Classifiable as a Human Carcinogen
Neurotoxicity: This product contains isopropyl alcohol, a central nervous system target.
Mutagenicity: No information available for product.
Reproductive: No information available for product.
Developmental: No information available for product.
Target Organs: skin, eyes, CNS, Kidney, Developmental and respiratory system.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Ethyl Alcohol (64-17-5)

96 hour LC50 Oncorhynchus mykiss: 12,900 mg/L (flow-through) (30days old)
96 hour LC50 Pimephales promelas 14.2 mg/L
5 min EC50 Photobacterium phosphoreum: 35,470 mg/L
30 min EC50 Photobacterium phosphoreum: 34,634 mg/L
48 hour EC50 Daphnia magna: 9,268 mg/L
24 hour EC50 Daphnia magna: 10,800 mg/L

Ecotoxicity: Isopropyl Alcohol (67-63-0)

96 Hr EC50 Scenedesmus Subspicatus: >1000 mg/L
72 Hr EC50 Scenedesmus subspicatus:>1000 mg/L
96 Hr LC50 Pimephales promelas: 9640 mg/L [flow through]
96 Hr LC50 Pimephales promelas: 94900 mg/L [flow through] (29 days old)
96 Hr LC50 Pimephales promelas: 61200 mg/L [flow through] (31 days old)
5 min EC50 Photobacterium phosphoreum: 35390 mg/L
48 Hr EC50 Daphnia magna: 13299 mg/L

Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, state, and local regulations.

Section 14: TRANSPORTATION INFORMATION

Shipping Name: Consumer Commodity ORM-D

Proper Shipping Name for Non-Consumer Commodity: Ethyl Alcohol Solutions, 3, UN1170, PGIII.

IMDG: UN1170, Ethanol Solutions (Ethyl Alcohol Solution), Class 3, PG II (21.6C cc) EmS # F-E S-D, Limited Quantity

Section 15: REGULATORY INFORMATION

Ethyl alcohol and isopropyl alcohol, components of this product, are on the TSCA inventory.

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This material contains ethyl alcohol a developmental toxicity when in alcoholic beverages.

The following components appear on one or more of the following state hazardous substance lists:

Component	CAS#	CA	MA	MN	NJ	PA
Isopropyl Alcohol	67-63-0	YES	YES	YES	YES	YES
Ethyl alcohol	64-17-5	YES	YES	YES	YES	YES

Section 16: Other Information

Prepared by: Vi-Jon Inc.

Disclaimer:

The information and recommendations contained in the Material Safety Data Sheet (MSDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

Vi-Jon, however, makes no representation as to the completeness or accuracy thereof, and information is supplied upon the express condition that the persons receiving the information will be required to make their own determination as to its suitability for their purposes prior to use. In no event will Vi-Jon be responsible for any damages of any nature whatsoever resulting from the use of, reliance upon, or the misuse of this information. User assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations.

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This information relates to the material designated and may not be valid for such material used in combination with any other materials nor in any process.

S.C. Johnson Wax
 Racine, Wisconsin 53403-5011
 Phone: (414) 631-2777
 Emergency Phone: (800) 228-5635
 Extension 092
 International Emergency Phone:
 Extension 092

4=Very High
 3=High
 2=Moderate
 1=Slight
 0=Insignificant

HAZARD RATING	
HMIS	NFPA
0 Health	
4 Flammability	
0 Reactivity	

MATERIAL SAFETY DATA SHEET

SECTION I-PRODUCT IDENTIFICATION

PRODUCT NAME: GLADE AIR FRESHENER - ALL FRAGRANCES			PRODUCT CODE: 10545-1	
CHEMICAL OR COMMON NAME: NA	DATE ISSUED: 02/05/92	SUPERSEDES: 10/30/87	MSDS SECTIONS WITH CHANGES: PREPARED BY: Terry A. Meyers Chemical Info. Adm.	

SECTION II-INGREDIENT INFORMATION

INGREDIENTS	WEIGHT %	EXPOSURE LIMIT
ISOBUTANE\PROPANE (CAS# 75-28-5, 74-98-6)	25-35	1000PPM (OSHA PEL) (PROPANE)
WATER	65-75	NA

SECTION III-PHYSICAL DATA

APPEARANCE/ODOR: DISPENSED AS A SPRAY MIST WITH FRAGRANT ODOR	SPECIFIC GRAVITY (H2O=1): 0.8
VAPOR PRESSURE (mm Hg): ND	PERCENT VOLATILE BY VOLUME (%): NA
SOLUBILITY IN WATER: Appreciable	VAPOR DENSITY (Air=1): ND
FREEZING POINT (°F): ND	BOILING POINT (°F): ND
PH: ND	EVAPORATION RATE (Butyl Acetate=1): NA
VOC (as packaged, minus H2O): ND	THEORETICAL VOC (lb/gal): ND

SECTION IV-FIRE AND EXPLOSION INFORMATION

FLASH POINT (°F) (Method Used): UNDER 20 (TCC) (PROPELLANT)
FLAMMABLE LIMITS: ND
EXTINGUISHING MEDIA: Foam, CO2, Dry Chemical, Water Fog.
SPECIAL FIREFIGHTING PROCEDURES: Normal fire fighting procedures may be used. Fight fire from maximum distance or protected area. Cool and use caution when approaching or handling fire-exposed containers.
UNUSUAL FIRE AND EXPLOSION HAZARDS: No special hazards known.

SECTION V-HEALTH HAZARD DATA

PRIMARY ROUTE OF ENTRY: NA
SIGNS AND SYMPTOMS: NA
FIRST AID PROCEDURES: NA
MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE:

MATERIAL SAFETY DATA SHEET

Page 2

S.C. Johnson Wax
1525 Howe Street
Racine, Wisconsin 53403

GLADE AIR FRESHENER - ALL FRAGRANCES
Product Number: 10545
Serial Number: 1

SECTION VI-REACTIVITY DATA

STABILITY:	Stable
STABILITY-CONDITIONS TO AVOID:	None known
INCOMPATIBILITY:	None known
HAZARDOUS DECOMPOSITION PRODUCTS:	When exposed to fire, produces normal products of combustion.
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS POLYMERIZATION-CONDITIONS TO AVOID:	None known

SECTION VII-SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:	Eliminate all ignition sources. Rinse affected area thoroughly with water.
WASTE DISPOSAL INFORMATION:	Recycle empty aerosol can to nearest steel recycling center. Use up package or give to someone who can.

SECTION VIII-SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:	No special requirements under normal use conditions.
VENTILATION:	General room ventilation adequate.
PROTECTIVE GLOVES:	No special requirements under normal use conditions.
EYE PROTECTION:	No special requirements under normal use conditions.
OTHER PROTECTIVE MEASURES:	NSR

SECTION IX-SPECIAL PRECAUTIONS

PRECAUTIONARY LABELING:	CAUTION: CONTENTS UNDER PRESSURE. DO NOT SET ON STOVE OR RADIATOR OR KEEP WHERE TEMPERATURE WILL EXCEED 120 F AS CONTAINER MAY BURST. DO NOT PUNCTURE OR THROW IN FIRE. KEEP OUT OF REACH OF CHILDREN.
OTHER HANDLING AND STORAGE CONDITIONS:	Keep out of reach of children. Do not pressurize, cut, heat, weld or expose container to flame; explosion could occur.

SECTION X-ADDITIONAL INFORMATION

ADDITIONAL INFORMATION:	FACTORY MUTUAL LEVEL I AEROSOL
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SECTION XI-TRANSPORTATION INFORMATION

DOT CLASS:	
DOT #	
SHIPPING NAME:	
DOT NOTES:	

MATERIAL SAFETY DATA SHEET

Page 3

S.C. Johnson Wax 1525 Howe Street Racine, Wisconsin 53403	GLADE AIR FRESHENER - ALL FRAGRANCES Product Number: 10545 Serial Number: 1
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NA-Not Applicable, NE-Not Established, NSR-No Special Requirement, ND-Not Determined

The information herein is given in good faith. No warranty expressed or implied is made. Any use of these data and information must be determined by the user to be in accordance with applicable Federal, State, and local laws and regulations. The information contained in this form is confidential and is submitted solely for your organization's internal use.

MSDS 106 (Rev. 5-16/95)



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product Name/Trade Name	Glass Cleaner
	Ref# 40000263
Manufacturer:	KIK CUSTOM PRODUCTS
	2921 Corder Street
	Houston, TX USA 77054
Contact Number:	Tel: 905-660-0444
24 Hour Emergency Contact:	Tel: 1-800-255-3924
Prepared By:	KIK CUSTOM PRODUCTS
Date Last Revised:	October 7, 2014
Replaces Date:	October 18, 2011

Section 2. Hazardous Ingredients

Name	%	CAS#	LD50/LC50
Aqua Ammonia	≤1.0	7664-41-7	43 mg/kg (oral) /30,000 ppm (1hr)

Section 3. Physical Data

State	Liquid	pH	10.5 – 12.5
Appearance	Blue	% Volatile	99.9 %
Odour	Ammonia	Boiling Point	N Av.
Specific Gravity	1.000-1.010	Vapour Pressure	N Av.
Solubility	100% in water	Freezing Point	Approx. 0°C

Section 4. Fire & Explosion

Flammable:	YES	NO	X
Means of Extinction:	As per surrounding fire		
Special Procedures:	As per surrounding fire.		
Flash Point: & Method:	> 200°F TCC		
Hazardous Combustion Products:	N. Av.		

Section 5. Reactivity Data

Chemical Stability:	YES	X	NO
Conditions:	N App.		
Incompatibility:	YES	NO	X
What Substances:			
Reactivity / Conditions:	None reactive		
Hazardous Decomposition Products:	N Av.		



Section 6. Toxicological Properties

Route of Entry

Skin Contact	X	Skin Absorption	Eye Contact	X
Inhalation Acute	X	Inhalation Chronic	Ingestion	X

Effects of Acute Exposure: Inhalation of vapours will irritate breathing passages. Contact with eyes may cause mild irritation. Ingestion may cause very mild sensation in mouth, throat and stomach.

Effects of chronic exposure: Prolonged and repeated exposure to skin will cause irritation, drying and dermatitis

Carcinogenicity, Reproductive Effects, Teratogenicity, Mutagenicity: No known effects

Section 7. Preventative Measures

Protective Equipment

Gloves: Recommended for prolonged exposure. Eyes: Not normally required

Respiratory: Not normally required. Footwear: Not Applicable

Leak & Spill Procedure: Rinse with water mop up dispose of in accordance with local, state/provincial and federal regulations

Section 8. First Aid Measures

Skin: Wash with soap and water

Eyes: Flush eyes with cool running water holding eyelids apart to ensure thorough rinsing for 15 minutes. Remove contact lenses.

Inhalation: Move to fresh air and restore breathing, if required.

Ingestion: DO NOT INDUCE VOMITING! Drink large amounts of water. Do not give anything by mouth to a convulsing or unconscious person. See a doctor immediately.

General Advice: If irritation occurs, see a doctor immediately.

Section 9. Regulatory Information

TRANSPORTATION: Not Restricted

WHIMIS Controlled Product: No

Health 1
 Flammability 0
 Reactivity 0

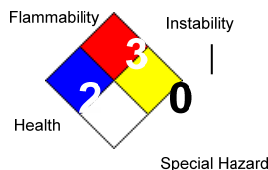
As the handling and use of products under user's conditions are beyond our control, no warranty, expressed or implied, is made concerning this product. The information contained herein is offered only as a guide to the handling of this specific material and is not intended to be all-inclusive in the manner and conditions of use and handling. The user assumes all risks of use or handling, whether or not in accordance with any directions or suggestions of the manufacturer. Manufacturer shall not be liable to purchaser or any other person for loss or damages directly or indirectly arising from the use of our product.

MATERIAL SAFETY DATA SHEET

Goof Off Cleaner VOC Compliant



HEALTH	*	2
FLAMMABILITY	3	2
PHYSICAL...	0	2
PPE	X	



Printed: 07/13/2011
Revision: 06/28/2011
Supercedes Revision: 04/16/2010

1. Product and Company Identification

Product Code: 2410.2

Product Name: Goof Off Cleaner VOC Compliant

Manufacturer Information

Company Name: W. M. Barr
2105 Channel Avenue
Memphis, TN 38113

Phone Number: (901)775-0100

Emergency Contact: 3E 24 Hour Emergency Contact (800)451-8346

Information: W.M. Barr Customer Service (800)398-3892

Web site address: www.wmbarr.com

Preparer Name: W.M. Barr EHS Dept (901)775-0100

Intended Use: Multi-Purpose Remover for grease, tar, ink, paint, adhesive, etc.

Product Category: General Purpose Adhesive Remover

Synonyms

FG612, FG653BBLK, FG654, FG654B, FG656, FG656TEMP, FG657, FG657TEMP, FG683, FG690, FG750

2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA PEL	ACGIH TWA	Other Limits
1. Acetone {2-Propanone}	67-64-1	60.0 -100.0 %	1000 ppm	500 ppm	No data.
2. Xylene (mixed isomers) {Benzene, dimethyl -}	1330-20-7	10.0 -30.0 %	100 ppm	100 ppm	No data.
3. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	<=4.0 %	100 ppm	100 ppm	No data.
4. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	1.0 -5.0 %	200 ppm	200 ppm	No data.
5. 3-Methyl-2-butanone {Methyl isopropyl ketone; 3-Methylbutan-2-one}	563-80-4	<=1.0 %	No data.	200 ppm	No data.

Hazardous Components (Chemical Name)	RTECS #	OSHA STEL	OSHA CEIL	ACGIH STEL	ACGIH CEIL
1. Acetone {2-Propanone}	AL3150000	No data.	No data.	750 ppm	No data.
2. Xylene (mixed isomers) {Benzene, dimethyl -}	ZE2100000	No data.	No data.	150 ppm	No data.
3. Ethylbenzene {Ethylbenzol; Phenylethane}	DA0700000	No data.	No data.	125 ppm	No data.
4. Methyl ethyl ketone {MEK; 2-Butanone}	EL6475000	No data.	No data.	300 ppm	No data.
5. 3-Methyl-2-butanone {Methyl isopropyl ketone; 3-Methylbutan-2-one}	EL9100000	No data.	No data.	No data.	No data.

3. Hazards Identification

Emergency Overview

Danger! Extremely Flammable! Harmful or fatal if swallowed. Vapor harmful. Eye Irritant.

Keep away from heat, sparks, flame and all other sources of ignition. Vapors may cause flash fire or ignite explosively.

Use only with adequate ventilation to prevent buildup of vapors. If the work area is not well ventilated, do not use this product.

Potential Health Effects (Acute and Chronic)

This product has not been tested as a whole to determine health effects. The health effects listed below are associated with the individual ingredients listed in Section 3.

INHALATION:

High vapor concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, loss of consciousness and even death). Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Intentional misuse by deliberately concentrating and inhaling solvents may be harmful or fatal.

EYES:

High vapor concentrations may cause irritation of the eyes. Causes eye irritation.

SKIN:

Prolonged or repeated contact may cause drying, cracking, or irritation.

INGESTION:

Harmful or fatal if swallowed. Pulmonary aspiration hazard. Ingestion may cause nausea, vomiting, diarrhea and inflammation of the lungs. Irritating to the throat, mouth, and stomach. May produce central nervous system effects, which include dizziness, loss of balance and coordination, unconsciousness, coma and even death.

CHRONIC OVEREXPOSURE EFFECTS:

Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Intentional misuse by deliberately concentrating and inhaling solvents may be harmful or fatal. Overexposure may cause liver and kidney injury.

TARGET ORGANS: liver, kidneys, central nervous system

PRIMARY ROUTES OF ENTRY: inhalation, ingestion, absorption

Signs and Symptoms Of Exposure

See Potential Health Effects.

Medical Conditions Generally Aggravated By Exposure

The following diseases or disorders may be aggravated by exposure to this product: skin, eye, liver, kidney, nervous system, respiratory system

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

4. First Aid Measures

Emergency and First Aid Procedures

Skin:

Immediately begin washing the skin thoroughly with large amounts of water and mild soap, if available, while removing contaminated clothing. Seek medical attention if irritation persists.

Eyes:

Immediately begin to flush eyes with water, remove any contact lens. Continue to flush the eyes for at least 15 minutes, then seek immediate medical attention.

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

Ingestion:

If swallowed, do NOT induce vomiting. Seek immediate medical attention. Call a physician, hospital emergency room, or poison control center immediately. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than hips to prevent aspiration.

Note to Physician

Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire Fighting Measures

Flammability Classification: NFPA Class IB
Flash Pt: -4.0 F (-20.0 C) Method Used: Setaflash Closed Cup (Rapid Setaflash)
Explosive Limits: LEL: No data. UEL: No data.
Autoignition Pt: No data available.

Fire Fighting Instructions

Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.

Flammable Properties and Hazards

Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, sparks, flame, and other ignition sources distant from material handling point.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide.

Extinguishing Media

Carbon dioxide, dry chemical, foam and/or water fog.

Unsuitable Extinguishing Media

None known.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Vapors may cause flash fire or ignite explosively.

Clean up: Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources; keep flares, smoking or flames out of hazard area. Use non-sparking tools. Use proper bonding and grounding methods for all equipment and processes. Keep out of waterways and bodies of water. Be cautious of vapors collecting in small enclosed spaces, sewers, low lying areas, confined spaces, etc.

Small spills: Take up with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.

Large spills: Dike far ahead of spill for later disposal.

Waste Disposal: Dispose in accordance with applicable local, state and federal regulations.

7. Handling and Storage

Precautions To Be Taken in Handling

Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.

Do not use this product near any source of heat or open flame, furnace areas, pilot lights, stoves, etc.

Do not use in small enclosed spaces, such as basements and bathrooms. Vapors can accumulate and explode if ignited.

Do not spread this product over large surface areas because fire and health safety risks will increase

dramatically.

Precautions To Be Taken in Storing

Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.

Other Precautions

Keep away from heat, sparks and open flame. No smoking.

8. Exposure Controls/Personal Protection

Respiratory Equipment (Specify Type)

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Eye Protection

Chemical goggles, also wear a face shield if a splashing hazard exists.

Protective Gloves

Appropriate chemical resistant gloves should be worn, such as nitrile rubber. Wear gloves with as much resistance to the chemical ingredients as possible. Other glove materials may provide protection. Glove selection should be based on chemicals being used and conditions of use. Consult your glove supplier for additional information. Gloves contaminated with product should be discarded and not reused.

Other Protective Clothing

To prevent skin contact wear protective clothing covering all exposed areas.

Various application methods can dictate the use of additional protective safety equipment, such as impermeable aprons to minimize exposure.

Engineering Controls (Ventilation etc.)

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Work/Hygienic/Maintenance Practices

Wash hands thoroughly after use and before eating, drinking, or smoking. Do not eat, drink, or smoke in the work area. A source of clean water should be available in the work area for flushing of eyes and skin. Discard any clothing or other protective equipment that cannot be decontaminated.

9. Physical and Chemical Properties

Physical States:	[] Gas [X] Liquid [] Solid
Melting Point:	No data.
Boiling Point:	150 F (65.6 C)
Autoignition Pt:	No data.
Flash Pt:	-4.0 F (-20.0 C) Method Used: Setaflash Closed Cup (Rapid Setaflash)
Specific Gravity (Water = 1):	0.797 - 0.8021
Density:	6.65 LB/GL
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	> 1
Evaporation Rate:	> 1
Solubility in Water:	Slight
Percent Volatile:	100 % by weight.
VOC / Volume:	20 % WT

Viscosity: < 5 cps

Appearance and Odor

Water white, free and clear.

Additional Physical Information

VOC (g/L): 161 g/L max

10. Stability and Reactivity

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability

No data available.

Incompatibility - Materials To Avoid

Strong oxidizing agents.

Hazardous Decomposition Or Byproducts

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Polymerization

No data available.

11. Toxicological Information

This product has not been tested as a whole. Information below will be for individual ingredients.

Acetone:

ACUTE TOXICITY:

LC50, rat, inhalation, 8 hrs, 50,000 mg/m³

LD50, rabbit, skin, 20,000 mg/kg

LD50, rat, oral, 5.8 g/kg

SKIN CORROSION / IRRITATION: Moderately irritating to skin. Prolonged or repeated skin contact can result in defatting and drying of the skin which may result in irritation or dermatitis.

SERIOUS EYE DAMAGE / IRRITATION: May cause moderate to severe irritation.

RESPIRATORY OR SKIN SENSITIZATION: Not a respiratory or skin sensitizer.

ASPIRATION HAZARD: Pulmonary aspiration hazard.

MUTAGENIC DATA: No data

IMMUNOTOXICITY: No data

NEUROTOXICITY: Clinical studies and case reports suggest slight neurological effects, mostly of the subjective type, in individuals exposed to varying concentrations of acetone. In most studies the subjects report discomfort, irritation of the eyes and respiratory passages, mood swings, and nausea following exposure to acetone vapor at concentrations of 500 ppm or higher. The fact that the effects subside following termination of exposure indicates that acetone may be the active compound, rather than a metabolite. Case reports of accidental poisoning also indicate that the effects (e.g., lethargy and drowsiness) are short-lived.

DEVELOPMENTAL/REPRODUCTIVE: Inhalation exposure to pregnant rats and mice did not cause statistically significant malformations in the offspring, but did result in lower fetal body weights in both species. Changes in testicular weight were observed in male rats following oral exposure and a premature menstrual period occurred in 3 of 4 women acutely exposed by inhalation. The significance of these endpoints of reproductive toxicity in men and women is unknown at this time.

CARCINOGEN STATUS: Not classifiable as to human carcinogenicity. Lack of data concerning carcinogenicity in humans or animals.

Methyl Ethyl Ketone:

ACUTE TOXICITY:

LD50, rat, 2.7-5.6 g/kg

LC50 Rat inhalation >5000 ppm/6 hr

SKIN CORROSION / IRRITATION: Can cause mild to moderate skin irritation and dermatitis.

SERIOUS EYE DAMAGE / IRRITATION: Liquid and vapor can cause severe eye irritation.

RESPIRATORY OR SKIN SENSITIZATION: Not a sensitizer.

ASPIRATION HAZARD: No data.
 MUTAGENIC DATA: Does not show mutagenic potential in Ames test or in most in vitro tests.
 IMMUNOTOXICITY: No data.
 NEUROTOXICITY: Excessive exposure leads to depression of the CNS, shown by loss of coordination, reflexes, and consciousness. Not neurotoxic.
 DEVELOPMENTAL/REPRODUCTIVE: No evidence of birth defects
 CARCINOGEN STATUS: Not classifiable as to human carcinogenicity.

Xylene:
 LD50 Rat oral 4.3 g/kg
 LD50 Rat oral 10 mL/kg /Xylene/
 LC50 Rat inhalation 6,350 ppm/4 hr
 LD50 Rabbit dermal > 5 ml/kg (43 g/kg). /Mixed Xylenes

Ethylbenzene:
 ACUTE TOXICITY:
 LD50 Rat oral 3,500 mg/kg
 LD50 Rabbit skin 17,800 mg/kg
 Ethylbenzene has low acute and chronic toxicity for both animals and humans.
 SKIN CORROSION / IRRITATION: No data.
 SERIOUS EYE DAMAGE / IRRITATION: It is an irritant of mucous membranes and the eyes.
 RESPIRATORY OR SKIN SENSITIZATION: Not a sensitizer.
 ASPIRATION HAZARD: No data
 MUTAGENIC DATA: Not mutagenic or teratogenic.
 IMMUNOTOXICITY: No data
 NEUROTOXICITY: It is toxic to the central nervous system.
 DEVELOPMENTAL/REPRODUCTIVE: No information available.
 CARCINOGEN STATUS: IARC 2B - Possibly Carcinogenic to Humans; ACGIH A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

Chronic Toxicological Effects

Contains ethylbenzene, which has been determined by NTP to be an animal carcinogen with no known relevance to humans. IARC has classified ethylbenzene as possibly carcinogenic to humans (2b) on the basis of sufficient evidence of carcinogenicity in laboratory animals but inadequate evidence of cancer in humans.

Carcinogenicity/Other Information

ACGIH A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
 ACGIH A4 - Not Classifiable as a Human Carcinogen
 IARC 2B - Possibly Carcinogenic to Humans

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Acetone {2-Propanone}	67-64-1	n.a.	n.a.	A4	n.a.
2. Xylene (mixed isomers) {Benzene, dimethyl -}	1330-20-7	n.a.	n.a.	A4	n.a.
3. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	No	2B	A3	No
4. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	n.a.	n.a.	n.a.	n.a.
5. 3-Methyl-2-butanone {Methyl isopropyl ketone; 3-Methylbutan-2-one}	563-80-4	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

This product has not been tested as a whole. Information below will be for individual ingredients.

Acetone:
 Toxicity:
 LC50 /Oncorhynchus mykiss/ (Rainbow trout, weight 1.0 g) 5,540 mg/L/96 hr at 12 deg C (95% confidence limit 4,740-6,330 mg/L), /static bioassay/
 LC50; Species: Oncorhynchus mykiss (Rainbow trout, fingerling, length 9.4 cm, weight 10.8 g); Conditions: freshwater, flow through, 10 deg C, pH 8.0; Concentration: 6100 mg/L for 24 hr

LC50 Pimephales promelas (Fathead minnow, age 33 days, length 22.6 mm, weight 0.159 g) 8,120 mg/L/96 h (95% confidence limit: 7,530-8,760 mg/L); flow through, 25.0 deg C, dissolved oxygen 6.7 mg/L, hardness 48.5 mg/L CaCO₃, alkalinity 45.8 mg/L CaCO₃, pH 7.58 /99% pure/
Persistence and Degradability: Biodegradation of this compound is expected, but volatilization has been shown to be the primary removal mechanism of acetone in water(5-7).
Bioaccumulative Potential: Potential for bioconcentration in aquatic organisms is low.
Mobility In Soil: High mobility in soil.

Methyl Ethyl Ketone:

Toxicity:

LC50 Daphnia magna (water flea) <520 mg/L 48-hr

LC50 Lepomis macrochirus (bluegill) 5,640-1,690 mg/L 24 to 96-hr

Has shown low toxicity to fish and aquatic invertebrates.

At above 100 ppm it may inhibit the growth of blue-green algae but such concentrations are unlikely to be reached except for short periods following accidental discharge.

Persistence and Degradability: MEK is readily biodegradable.

Bioaccumulative Potential: Data suggests that MEK is unlikely to concentrate in aquatic species.

Mobility in Soil: MEK is expected to have very high mobility based upon Koc values of 29 and 34 obtained in silt loams.

Xylene:

Toxicity:

LD50 Goldfish 13 mg/l/24 hr

LC50 Rainbow trout 13.5 mg/l/96 hr

LC50 Fathead minnow 46 mg/l/1 hr; 42 mg/l/24-96 hr

Persistence and Degradability: It has been found that xylene is biodegraded in soil and groundwater samples under aerobic conditions and may be degraded under anaerobic denitrifying conditions.

Bioaccumulative Potential: The potential for bioconcentration in aquatic organisms is low based on an experimental BCF value of 20, measured in eels.

Mobility in Soil: Xylene is expected to have moderate to high mobility in soils based upon experimental Koc values obtained with a variety of soils at differing pH values and organic carbon content.

Ethylbenzene:

Toxicity:

LC50 Lepomis macrochirus 32 mg/l/96 hr

LC50 Carassius auratus 94.44 mg/l/96 hr

LC50 Pimephales promelas (fathead minnow) 12.1 mg/l/96 hr

Persistence and Degradability: Volatilization from moist soil surfaces is expected to be an important fate process based upon a Henry's Law constant of 7.88X10⁻³ atm-cu m/mole. Ethylbenzene may volatilize from dry soil surfaces based upon its vapor pressure. Biodegradation in soil takes place via nitrate-reducing processes. If released into water, ethylbenzene may adsorb to suspended solids and sediment in water based upon the estimated Koc. Volatilization from water surfaces is expected to be an important fate process based upon this compound's Henry's Law constant.

Bioaccumulative Potential: Measured BCFs of 0.67 to 15 suggest the potential for bioconcentration in aquatic organisms is low.

Mobility in Soil: Expected to have moderate mobility based upon an estimated Koc of 520.

13. Disposal Considerations

Waste Disposal Method

Dispose of waste at an approved hazardous waste treatment/disposal facility in accordance with applicable local, provincial and federal regulations.

Do not place material in general trash.

Do not allow material to enter bodies of water or sewers.

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name Paint Related Material
DOT Hazard Class: 3
DOT Hazard Label: FLAMMABLE LIQUID
UN/NA Number: UN1263
Packing Group: II

Additional Transport Information

The shipper/supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

For D.O.T. information, contact W.M. Barr Technical Services at 1-800-398-3892.

15. Regulatory Information

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Acetone {2-Propanone}	67-64-1	No	Yes 5000 LB	No	Yes
2. Xylene (mixed isomers) {Benzene, dimethyl -}	1330-20-7	No	Yes 100 LB	Yes	Yes
3. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	No	Yes 1000 LB	Yes	Yes
4. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	No	Yes 5000 LB	No	Yes
5. 3-Methyl-2-butanone {Methyl isopropyl ketone; 3-Methylbutan-2-one}	563-80-4	No	No	No	No

US EPA CAA, CWA, TSCA

Hazardous Components (Chemical Name)	CAS #	EPA CAA...	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. Acetone {2-Propanone}	67-64-1	HAP, ODC ()	No	Inventory	No
2. Xylene (mixed isomers) {Benzene, dimethyl -}	1330-20-7	HAP, ODC ()	Yes	Inventory	No
3. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	HAP, ODC ()	Yes	Inventory, 4 Test	Yes
4. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	ODC ()	No	Inventory	No
5. 3-Methyl-2-butanone {Methyl isopropyl ketone; 3-Methylbutan-2-one}	563-80-4	HAP, ODC ()	No	Inventory	No

SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

- Sec.302:** EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
- Sec.304:** EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
- Sec.313:** EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
- Sec.110:** EPA SARA 110 Superfund Site Priority Contaminant List

TSCA (Toxic Substances Control Act) Lists:

- Inventory:** Chemical Listed in the TSCA Inventory.
- 5A(2):** Chemical Subject to Significant New Rules (SNURS)

MATERIAL SAFETY DATA SHEET

Goof Off Cleaner VOC Compliant

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Revision: 06/28/2011

Supersedes Revision: 04/16/2010

6A:	Commercial Chemical Control Rules
8A:	Toxic Substances Subject To Information Rules on Production
8A CAIR:	Comprehensive Assessment Information Rules - (CAIR)
8A PAIR:	Preliminary Assessment Information Rules - (PAIR)
8C:	Records of Allegations of Significant Adverse Reactions
8D:	Health and Safety Data Reporting Rules
8D TERM:	Health and Safety Data Reporting Rule Terminations
12(b):	Notice of Export

Other Important Lists:

CWA NPDES:	EPA Clean Water Act NPDES Permit Chemical
CAA HAP:	EPA Clean Air Act Hazardous Air Pollutant
CAA ODC:	EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)
CA PROP 65:	California Proposition 65

International Regulatory Lists:

EPA Hazard Categories:

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

- Yes [] No Acute (immediate) Health Hazard
 Yes [] No Chronic (delayed) Health Hazard
 Yes [] No Fire Hazard
 Yes No Sudden Release of Pressure Hazard
 Yes No Reactive Hazard

Regulatory Information

This product has been classified according to the hazard criteria of the Controlled Products Regulations.

Concentrations reported in section 2 are weight/weight.

Ingredients disclosed in section 2 are on Canadian DSL.

Acetone WHMIS Classification: B2, D2B

Acetone WHMIS Health Effects Criteria Met by this Chemical:

D2B - Eye irritation - toxic - other

Acetone WHMIS Ingredient Disclosure List: Included for disclosure at 1% or greater.

Methyl Ethyl Ketone CAS# 78-93-3

WHMIS Classification:

B2 - Flammable and combustible material - Flammable liquid

D2B - Poisonous and infectious material - Other effects - Toxic

WHMIS Health Effects Criteria Met by this Chemical: D2B - Eye irritation - toxic - other

WHMIS Ingredient Disclosure List: Included for disclosure at 1% or greater.

Xylene CAS # 1330-20-7

WHMIS Classification:

B2 - Flammable and combustible material - Flammable liquid

D2A - Poisonous and infectious material - Other effects - Very toxic

D2B - Poisonous and infectious material - Other effects - Toxic

WHMIS Health Effects Criteria Met by this Chemical:

D2B - Skin irritation - toxic - other

D2A - Teratogenicity and embryotoxicity - very toxic - other

WHMIS Ingredient Disclosure List: Not included. Meets criteria for disclosure at 0.1% or greater

MATERIAL SAFETY DATA SHEET
Goof Off Cleaner VOC Compliant

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Supersedes Revision: 04/16/2010

Ethyl Benzene CAS # 100-41-4

WHMIS Classification:

B2 - Flammable and combustible material - Flammable liquid

D2A - Poisonous and infectious material - Other effects - Very toxic

D2B - Poisonous and infectious material - Other effects - Toxic

WHMIS Health Effects Criteria Met by this Chemical:

D2A - Carcinogenicity - very toxic - other

D2B - Skin irritation - toxic - other

WHMIS Ingredient Disclosure List: Included for disclosure at 0.1% or greater.



16. Other Information

Company Policy or Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required

Material Safety Data Sheet

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td>3*</td> </tr> <tr> <td>Fire Hazard</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>1</td> </tr> </table>	Health Hazard	3*	Fire Hazard	0	Reactivity	1		
Health Hazard	3*								
Fire Hazard	0								
Reactivity	1								

Issuing Date 07-May-2007

Revision Date 07-May-2007

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Great Value (GV) Regular Bleach

Recommended Uses
 Bleach
 Contains more than 1% of active chlorine
 Cleaning agent
 Home care

Supplier Address
 KIK International
 33 MacIntosh Blvd, Concord, Ontario,
 L4K 4L5
 CA
 Phone:905-660-0444
 Fax:905-660-7333
 Contact Phone: 905-660-0444
 Emergency Phone: : 1-800-255-3924

Company Emergency Phone Number : 1-800-255-3924

2. HAZARDS IDENTIFICATION

2. HAZARDS IDENTIFICATION

WARNING!

Emergency Overview

Severe eye irritation.
 May cause burns of eyes, skin and mucous membranes
 Irritating to eyes, respiratory system and skin
 Harmful if swallowed.

Appearance Pale yellow

Physical State Liquid.

Odor slight chlorine

Potential Health Effects

Principle Routes of Exposure Inhalation, Skin contact, Eye contact.

Acute Toxicity

Eyes Severely irritating to eyes. May cause burns. Risk of serious damage to eyes.
Skin Contact causes severe skin irritation and possible burns.
Inhalation Harmful by inhalation.
Ingestion Can burn mouth, throat, and stomach. Harmful if swallowed.

Chronic Effects Avoid repeated exposure. Possible risks of irreversible effects.

Aggravated Medical Conditions None known

Environmental Hazard See Section 12 for additional Ecological information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Sodium hypochlorite	7681-52-9	5 - 10
Water	7732-18-5	60 - 100

4. FIRST AID MEASURES

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Inhalation Move to fresh air. Call a physician or Poison Control Center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion Immediate medical attention is required. Do not induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Remove from exposure, lie down. Call a physician or Poison Control Center immediately.

Notes to Physician Treat symptomatically.

Protection of First-aiders Use personal protective equipment. Avoid contact with skin, eyes and clothing.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not flammable
Flash Point	Not Applicable
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Uniform Fire Code	<ul style="list-style-type: none"> • Irritant: Liquid • Other Health Hazard: Target Organ Toxin--Liquid
Hazardous Combustion Products	Carbon oxides
<u>Explosion Data</u>	
Sensitivity to mechanical impact	Not sensitive
Sensitivity to static discharge	Not sensitive

Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

<u>NFPA</u>	Health Hazard 2	Flammability 0	Stability 0	Physical and Chemical Hazards -
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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.
Methods for Containment	Prevent further leakage or spillage if safe to do so
Methods for Cleaning Up	Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. After cleaning, flush away traces with water.
Other Information	Refer to protective measures listed in Sections 7 and 8.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing.
Storage	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep in properly labeled containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
----------------------------	---

Engineering Measures	Showers Eyewash stations Ventilation systems
Personal Protective Equipment	
Eye/Face Protection	Tightly fitting safety goggles. Face-shield.
Skin and Body protection	Impervious clothing. Impervious gloves. Boots. Chemical resistant apron.
Respiratory Protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required
Hygiene Measures	Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Keep away from food, drink and animal feeding stuffs. Regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Pale yellow	Odor	slight chlorine
Odor Threshold	No information available	Physical State	Liquid
pH	12.6		
Flash Point	Not Applicable	Autoignition Temperature	Not applicable
Decomposition Temperature	No data available	Boiling Point/Range	100Â°C / 212Â°F
Melting Point/Range	No data available		
Flammability Limits in Air	No data available	Explosion Limits	No data available
Specific Gravity	No data available	Water Solubility	Soluble in water
Solubility	No data available	Evaporation Rate	No data available
Vapor Pressure	No data available	Vapor Density	No data available
VOC Content	Not applicable	Partition Coefficient (n-octanol/water)	

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Conditions to Avoid	Exposure to air or moisture over prolonged periods.
Incompatible Products	Incompatible with strong acids and bases. Incompatible with oxidizing agents.
Hazardous Decomposition Products	Thermal decomposition can lead to release of irritating gases and vapors.
Hazardous Polymerization	Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information No acute toxicity information is available for this product.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hypochlorite	8200 mg/kg (Rat)	10000 mg/kg (Rabbit)	

Chronic Toxicity

Chronic Toxicity Avoid repeated exposure. Possible risks of irreversible effects.

Carcinogenicity There are no known carcinogenic chemicals in this product

Mutagenicity

Sensitization May cause sensitization of susceptible persons.

Reproductive Toxicity This product does not contain any known or suspected reproductive hazards

Target Organ Effects Eyes, Skin.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic organisms.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Sodium hypochlorite	EC50 = 0.095 mg/L 24 h	LC50 0.22 - 0.62 mg/L Pimephales promelas 96 h LC50= 5.9 mg/L Pimephales promelas 96 h		EC50 = 2.1 mg/L 96 h

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging Do not re-use empty containers.

US EPA Waste Number D002

This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical Name	California Hazardous Waste Status
Sodium hypochlorite	Toxic; Ignitable; Reactive

14. TRANSPORT INFORMATION

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not Comply
CHINA	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hypochlorite	100 lb			X

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Sodium hypochlorite	100 lb	

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium hypochlorite	X	X	X		
Water					

International Regulations

Mexico - Grade

No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

E Corrosive material

**16. OTHER INFORMATION**

Issuing Date	07-May-2007
Revision Date	07-May-2007
Revision Note	No information available

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS



The Clorox Company
 1221 Broadway
 Oakland, CA 94612
 Tel. (510) 271-7000

Material Safety Data Sheet

I Product: GREEN WORKS® NATURALLY DERIVED ALL-PURPOSE CLEANER										
Description: LIQUID WITH CITRUS SCENT										
Other Designations	Distributor									
Original Tangerine Simply Lemon	The Clorox Sales Company 1221 Broadway Oakland, CA 94612									
Emergency Telephone Nos.										
For Medical Emergencies call: 1-800-446-1014 For Transportation Emergencies, call Chemtrec: 1-800-424-9300										
II Health Hazard Data	III Hazardous Ingredients									
Eye irritant. May cause skin irritation. No medical conditions are known to be aggravated by exposure to this product.	<table border="1"> <thead> <tr> <th>Ingredient</th> <th>Concentration</th> <th>Worker Exposure Limit</th> </tr> </thead> <tbody> <tr> <td>Alkyl polyglucoside CAS # 68515-73-1</td> <td>1 - 5%</td> <td>not established</td> </tr> <tr> <td>Ethyl alcohol CAS # 64-17-5</td> <td>1 - 5%</td> <td>1000 ppm - TLV-TWA 1000 ppm - OSHA PEL</td> </tr> </tbody> </table>	Ingredient	Concentration	Worker Exposure Limit	Alkyl polyglucoside CAS # 68515-73-1	1 - 5%	not established	Ethyl alcohol CAS # 64-17-5	1 - 5%	1000 ppm - TLV-TWA 1000 ppm - OSHA PEL
Ingredient	Concentration	Worker Exposure Limit								
Alkyl polyglucoside CAS # 68515-73-1	1 - 5%	not established								
Ethyl alcohol CAS # 64-17-5	1 - 5%	1000 ppm - TLV-TWA 1000 ppm - OSHA PEL								
FIRST AID:	TLV-TWA = ACGIH Threshold Limit Value - Time Weighted Average									
EYE CONTACT: Immediately rinse with plenty of water. If irritation persists, call a doctor.	OSHA-PEL = OSHA Permissible Exposure Limit - Time Weighted Average									
INGESTION: Drink a glassful of water. Call a doctor or poison control center.	None of the materials in this product are on the IARC, OSHA, or NTP carcinogen lists.									
SKIN CONTACT: Rinse with plenty of water. If irritation persists, call a doctor.										
INHALATION: Move person to fresh air. If breathing problems develop, call a doctor.										
IV Special Protection and Precautions	V Transportation and Regulatory Data									
Hygienic Practices: Wash hands after direct contact. Do not wear product-contaminated clothing for prolonged periods.	DOT/IATA/IMDG: Not restricted.									
Engineering Controls: Use local exhaust to minimize exposure to product mist.	EPA - SARA Title III/CERCLA: This product is regulated under Sections 311/312. This product contains no chemicals which are regulated under Section 313 or regulated under Section 304/CERCLA.									
Personal Protective Equipment: Wear safety glasses. Wear rubber or neoprene gloves if there is the potential for repeated or prolonged skin contact. In situations where exposure limits may be exceeded, a NIOSH-approved respirator is advised.	TSCA: All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.									
	TSCA 12(b): This product is not subject to TSCA 12(b) reporting requirements.									
VI Spill Procedures/Waste Disposal	VII Reactivity Data									
Spill Procedures: Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.	Stable under normal use and storage conditions.									
Waste Disposal: Dispose of in accordance with all applicable federal, state, and local regulations.										
VIII Fire and Explosion Data	IX Physical Data									
Flash Point: >200°F (closed cup)	pH..... ~11.0									
Fire Extinguishing Agents: Dry chemical, carbon dioxide (CO ₂), foam, or water spray.	Specific gravity 1.0									
	Solubility in water Soluble									



SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

SECTION 1: Identification

Product identifier	
Product name	Hardness Reagent
Product number	R-0012
Recommended use and restrictions	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
Manufacturer	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

SECTION 2: Hazard(s) identification

Physical hazards	No data available
Health hazards	No data available
Environmental hazards	No data available
Label elements	
Hazard pictograms	No data available
Signal word	No data available
Hazard statements	No data available
Precautionary statements	
Prevention	No data available
Response	No data available
Storage	Keep tightly capped. Store out of direct sunlight between 36°F–85°F.
Disposal	No data available
Hazards not otherwise classified	Avoid contact with skin, eyes, or clothing. For contact with skin or eyes, flush 20 minutes with water. If ingested, contact physician or local poison control center. Treat symptoms as needed.

SECTION 3: Composition/information on ingredients

Mixture			
Chemical name	Common name and synonyms	CAS number	%
Water	Dihydrogen oxide	7732-18-5	95–99
Ethylenediaminetetraacetic acid EDTA		60-00-4	0.1–5
Other components below reportable levels			0.01–0.1

SECTION 4: First-aid measures

If inhaled

Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical attention if irritation develops.

In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice.

If swallowed

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice.

Most important symptoms and effects, both acute and delayed

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5: Firefighting measures**Extinguishing media**

Suitable extinguishing media	Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Specific hazards arising from the substance or mixture

Fire hazard	Not flammable
Explosion hazard	Not explosive
Reactivity	Hazardous reactions will not occur under normal conditions.
Hazardous combustion products	Hydrogen chloride gas and magnesium oxide

Advice for firefighters

Precautionary measures	Exercise caution when fighting any chemical fire; hazardous fumes will be present.
Firefighting equipment/instructions	Use water spray or fog for cooling exposed containers.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	Refer to section 9 of the SDS for flammability properties.

SECTION 6: Accidental release measures**Personal precautions, protective equipment, and emergency procedures**

Wear appropriate protective equipment and clothing during cleanup. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

Environmental precautions

Avoid discharge into drains, watercourses, or onto the ground.

Methods and material for containment and cleaning up

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recover, flush area with water. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Reference to other sections

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

SECTION 7: Handling and storage**Personal precautions, protective equipment, and emergency procedures**

Do not breathe the mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

Conditions for safe storage, including any incompatibilities

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

SECTION 8: Exposure controls/personal protection

Occupational exposure limits No occupational exposure limits noted for the ingredient(s)

Biological limit values No biological exposure limits noted for the ingredient(s)

Exposure controls

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.
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Personal protective equipment

- Eye/face protection Wear appropriate chemical safety goggles if contact is likely to occur.
- Skin protection Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
- Body protection Wear appropriate protective clothing.
- Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Clear, colorless or nearly colorless
Odor	Odorless
Odor threshold	No data available
pH	8.1
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	212°F (100°C)
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	17 mm Hg
Relative vapor density	0.6
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

SECTION 10: Stability and reactivity

Reactivity	Hazardous reactions will not occur under normal conditions.
Chemical stability	Stable under recommended handling and storage conditions (refer to section 7 of the SDS)
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use
Conditions to avoid	Contact with incompatible materials. Do not use in areas without adequate ventilation.
Incompatible materials	Acids, metals, and strong oxidizing agents

SECTION 11: Toxicological information

Information on toxicological effects

Inhalation	May cause irritation to the respiratory system
Skin contact	May cause slight or mild transient irritation
Eye contact	May cause slight or mild transient irritation
Ingestion	May cause irritation, nausea, vomiting, and diarrhea

Most important symptoms/effects, acute and delayed

Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching.

Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Acute toxicity

This product is not classified as an acute toxicity hazard. See below for individual ingredient acute toxicity data.

Components	Species	Test Results
Ethylenediaminetetraacetic acid (CAS 60-00-4)		
Acute		
<i>Oral</i>		
LD ₅₀	Rat	4500 mg/kg
Acute toxicity	No data available	
Respiratory or skin sensitization	No data available	
Germ cell mutagenicity	No data available	
Carcinogenicity	No data available	
Reproductive toxicity	No data available	
Specific target organ toxicity (single exposure)	No data available	
Specific target organ toxicity (repeated exposure)	No data available	
Aspiration hazard	No data available	

SECTION 12: Ecological information

This product is not classified as environmentally hazardous; however, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

SECTION 13: Disposal considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

No data available

SECTION 15: Regulatory information

No data available

SECTION 16: Other information

NFPA Rating

Health hazard	0
Fire hazard	0
Reactivity	0
Specific	N/A

Disclaimer

The information in the Safety Data Sheet is offered for your consideration and guidance for safe handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

License granted to make unlimited paper copies for internal use only. This Safety Data Sheet may not be altered in any way without the expressed knowledge and permission of Taylor Technologies, Inc. The information contained in this sheet is based on lab experience and the most current data available.

Issue date:

June 2015

Last revision

June 2016



Material Safety Data Sheet

Document Title: MSDS Hibiclens®	Document Number: US-MSDS-030 Revision: 1	
Approval: Caitlin Senter	Page 1 of 6	Effective Date: 02/18/2010

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Name: HIBICLENS®

Addresses/Phone Numbers:

Mölnlycke Health Care US, LLC
5550 Peachtree Parkway
Suite 500
Norcross, GA 30092

1-800-843-8497

Manufacturing

DPT Lakewood, Inc.
Lakewood, NJ 08701

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No.: None assigned for the product
Use: Antimicrobial agent

HAZARDOUS INGREDIENT(S)	CAS No.	% (w/w)
Chlorhexidine gluconate	018472-51-0	4.0
Isopropanol (2-Propanol)	000067-63-0	4.0

3. HAZARDS IDENTIFICATION

Form: Clear liquid
Color: Pink
Odor: Fragranced

Repeated or prolonged skin contact may cause irritation in sensitive individuals.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Mölnlycke Health Care
Peachtree Parkway, Suite 500
Norcross, GA 30092 USA

Tel 678 250 7900
Fax 678 250 7984
www.molnlycke.com

Material Safety Data Sheet

Document Title: MSDS Hibiclens®	Document Number: US-MSDS-030 Revision: 1
Approval: Caitlin Senter	Page 2 of 6
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MATERIAL SAFETY DATA SHEET

4. FIRST-AID MEASURES

Inhalation: Remove patient from exposure, keep warm and at rest. Obtain medical attention if ill effects occur.
 Skin Contact: Wash skin with water.
 Eye Contact: Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain medical attention.
 Ingestion: Wash out mouth with water. Obtain medical attention.

Note to Physicians

Symptomatic treatment and supportive therapy as indicated. For further detail, consult the prescribing information.

5. FIRE-FIGHTING MEASURES

Flammable Properties

Flash Point (Deg C/Deg F): 64.4/148
 Flammable Limits (Lower) (% v/v): 2
 Flammable Limits (Upper) (% v/v): 12
 Flammable Limits: (Isopropanol)
 Auto Ignition Temperature (Deg C/Deg F): No data

Combustible.
 If involved in a fire, it may emit flammable vapors.

Extinguishing Media

Water spray, foam, dry chemical or CO₂.

Fire-Fighting Instructions

A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Small spillages: Clear up spillages. Drench spillages with water and wash to drain.
 Large spillages: Do not allow to enter drains, sewers, or watercourses. Absorb spillages onto sand, earth, or any suitable absorbent material.
 Transfer to a container for disposal.
 Wash the spillage area with water, and flush to a sewer services by a wastewater treatment facility.



Material Safety Data Sheet

Document Title: MSDS Hibiclens®		Document Number: US-MSDS-030 Revision: 1	
Approval: Caitlin Senter	Page 3 of 6		Effective Date: 02/18/2010

MATERIAL SAFETY DATA SHEET

7. HANDLING AND STORAGE

7.1 HANDLING

Avoid contact with eyes.

Follow procedures specified in the National Fire Protection Association Codes and Standards for handling flammable liquids.

7.2 STORAGE

Keep container tightly closed. Protect from light.

Storage Temperature: room temperature

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls
Occupational Exposure Limits**

No ACGIG TLV or OSHA PEL is assigned to this mixture.

HAZARDOUS INGREDIENT(S)	TWA		STEL/CEILING (C)		
	ppm	mg/m ³	ppm	mg/m ³	
Chlorhexidine	-	-	-	0.1	COM
This is an in-house standard for the active ingredient during manufacture.					
Isopropyl alcohol	400	983	500	1230	TLV

Personal Protective Equipment

Respirators: Use NIOSH approved respirator for dusts, mists, and fumes with a TLV greater than 0.05 mg/m³ in combination with an organic vapor cartridge.

Protective Clothing: Impervious gloves and apron.

Eye Protection: Chemical tight goggles; full faceshield in addition if splashing is possible.

Other Protective Equipment: Eyewash station and safety shower in work area.

Material Safety Data Sheet

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MATERIAL SAFETY DATA SHEET

Name: **HIBICLENS®**

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Clear liquid
Color:	Pink
Odor:	Fragranced
pH (Value):	5-6.5
Boiling Point (Deg C/Deg F):	No data
Vapor Pressure (mm Hg):	No data
Solubility (Water):	Soluble
Specific Gravity:	1.06
Vapor Density (Air = 1):	No data

10. STABILITY AND REACTIVITY

Stable under normal conditions.

Hazardous Reactions: Incompatible materials: Strong oxidizing agents, anionic compounds
Hazardous polymerization will not occur.

Hazardous Decomposition Product(s): Carbon monoxide, carbon dioxide, nitrogen oxides, ammonia

11. TOXICOLOGICAL INFORMATION

Inhalation: The vapor has anesthetic properties and when inhaled at concentrations above the occupational exposure limit, it may cause headache, fatigue, dizziness, incoordination, and loss of consciousness.

Skin Contact: Repeated or prolonged skin contact may cause irritation in sensitive individuals.

Eye Contact: Liquid splashes may cause eye irritation.

Ingestion: The swallowing of small splashes is unlikely to cause any adverse effects.

Long Term Exposure: Chronic effects are unlikely.



Material Safety Data Sheet

Document Title: MSDS Hibiclens®	Document Number: US-MSDS-030 Revision: 1	
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MATERIAL SAFETY DATA SHEET

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

The product is soluble in water.

Toxicity

Harmful to aquatic organisms, may cause long-term effects in the aquatic environment.

Effect on Effluent Treatment

Low toxicity to sewage microorganisms.

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state, or national legislation.

Disposal Method

Discarded product is not a hazardous waste under RCRA, 40 CFR 261.

Container Disposal

Empty container contains product residue. Observe all hazard precautions.

14. TRANSPORT INFORMATION

Not Classified as Dangerous for Transport.

15. REGULATORY INFORMATION

TSCA (Toxic Substances Control Act) Regulations, 40 CFR 710:

All ingredients are on the TSCA Chemical Substances Inventory.

CERCLA and SARA Regulations (40 CFR 355, 370, and 372):

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

16. OTHER INFORMATION

This Material Safety Data Sheet was prepared in accordance with ANSI Standard Z400.1, 1993.

Mölnlycke Health Care
Peachtree Parkway, Suite 500
Norcross, GA 30092 USA

Tel 678 250 7900
Fax 678 250 7984
www.molnlycke.com



Material Safety Data Sheet

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MATERIAL SAFETY DATA SHEET

GLOSSARY

COM:	The company aims to control exposure in its workplace to this limit. This is an in-house standard for the active ingredient handled during manufacture
TLV:	The company aims to control exposure in its workplace to the ACGIH limit.
Sk:	Can be absorbed through skin.
Sen:	Capable of causing respiratory sensitization

The information herein is given in good faith, but no warranty, expressed or implied, is made.

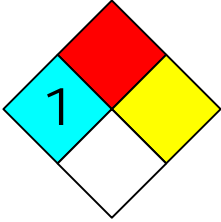
MATERIAL SAFETY DATA SHEET

PRODUCT: Alcohol Free Lens Cleaning Liquid

Issue Date: 18 July 2006

Revision Date: 3 April 2013

Revision Number: 7

NFPA	HMIS	PPE	Transport Symbol								
	<table border="1"><tr><td>Health Hazard</td><td>1</td></tr><tr><td>Fire Hazard</td><td>0</td></tr><tr><td>Reactivity</td><td>0</td></tr><tr><td></td><td></td></tr></table>	Health Hazard	1	Fire Hazard	0	Reactivity	0				
Health Hazard	1										
Fire Hazard	0										
Reactivity	0										

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Alcohol Free Lens Cleaner
Leader Lens Cleaner
NaturalEyes Lens Cleaner

Product Number(s): Various

Recommended Use: Lens cleaner

Supplier Information:
Hilco
33 West Bacon Street, Plainville, Massachusetts, 02762 USA
Phone: 1-508-699-4406
Fax: 1-508-699-4579
Contact:
Contact Phone:
Emergency Phone: Call INFOTRAK - 1-800-535-5053

2. HAZARDS IDENTIFICATION

Potential Health Effects

Acute Toxicity

Eyes
Skin

Mild eye irritant.

No adverse effects expected under typical use conditions. Prolonged exposure may cause skin dryness.

Inhalation
Ingestion

No adverse effects expected under typical use conditions.

May cause stomach or intestinal discomfort if swallowed.

Chronic Effects

No known effects based on information supplied.

Aggravated Medical Conditions

No medical conditions are known to be aggravated by exposure to this product.

Interactions w/ Other Chemicals

None known.

Environmental Hazards

See section 12

MATERIAL SAFETY DATA SHEET

PRODUCT: Alcohol Free Lens Cleaning Liquid

Issue Date: 18 July 2006

Revision Date: 3 April 2013

Revision Number: 7

3. INGREDIENTS

Chemical Name	CAS No.	% by Weight
Water	773-18-5	85 - 95
2-butoxyethanol	111-76-2	5-15
Sodium Bicarbonate	144-55-8	<0.2
Fragrance	Mixture	<0.2

4. FIRST AID MEASURES

Eye Contact	Reddening may develop. Rinse Immediately with plenty of clean water, also under eyelids, for at least 15 minutes. Keep eyes wide open while rinsing. If symptoms persist, call a physician.
Skin Contact	Minimal effects expected, and if any, are reversible. If any, immediately wash with soap and water. If irritation persists, or allergic reaction occurs, call a physician.
Inhalation	Move to fresh air.
Ingestion	Drink plenty of water to dilute. Do not induce vomiting. If stomach or intestinal upset occurs, consult a physician immediately.
Notes to Physicians	Treat symptomatically.

5. FIRE FIGHTING MEASURES

This product is stable, non-flammable in its liquid state, and will not burn.

Flammable Properties	Not flammable.
Flash Point	Not flammable
Extinguishing Media	Not flammable, non-explosive.
Uniform Fire Code	
Hazardous Byproducts of Combustion	None expected
Explosion Data	
Sensitivity to Mechanical Impact	Not sensitive
Sensitivity to Static Discharge	Not sensitive
Protective Equipment	None required

Special Precautions

NFPA Health Hazard: 1 Flammability: 0 Stability: 0 Physical & Chemical Hazards:

6. ACCIDENTAL RELEASE & SPILL MEASURES

Personal Precautions	Avoid contact with skin and eyes. Wash hands thoroughly after clean-up.
Containment Methods	Prevent further leakage or spillage. Dam up area.
Clean-up Methods	Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal bunder, sawdust). Pick up and transfer to properly labeled containers.

MATERIAL SAFETY DATA SHEET

PRODUCT: Alcohol Free Lens Cleaning Liquid

Issue Date: 18 July 2006

Revision Date: 3 April 2013

Revision Number: 7

7. HANDLING AND STORAGE

Handling Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin eyes. Keep out of reach of children.

Storage No special precautions required.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-butoxyethanol	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ Skin	IDLH: 700 ppm

Engineering Measures None required under normal use.

Personal Protective Equipment

- Eye & Face Protection** Eye protection not required under normal use conditions.
- Skin & Body Protection** Repeated daily application to the skin without rinsing, or continuous contact on the skin may lead to temporary, but reversible, irritation. Rinse completely from skin after contact.
- Respiratory Protection** None required. Avoid breathing vapor or mist.

Hygiene Measures Generally good industrial hygiene practices. Avoid contact with eyes. Avoid breathing vapor or mist. Wash hands thoroughly after use and before eating, drinking or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance**Clear, pale pink or pale blue liquid.
- Odor**Mild citrus
- Odor Threshold**.....no information available
- Physical State**Liquid
- pH**7
- Flash Point**no information available
- Auto-ignition Temperature**.....no information available
- Decomposition Temperature**no information available
- Boiling Point**100A°C/210A°F
- Melting Point**no information available
- Flammability Limits in Air**no information available
- Explosion Limits**no information available
- Water Solubility**.....soluble in water
- Solubility**no information available
- Evaporation Rate**no information available
- Vapor Pressure**no information available
- Vapor Density**.....1.3
- Specific Gravity (@20°C)**.....1.010
- VOC Content**5.09
- Partition coefficient (n-octanol/water)**

MATERIAL SAFETY DATA SHEET

PRODUCT: Alcohol Free Lens Cleaning Liquid

Issue Date: 18 July 2006

Revision Date: 3 April 2013

Revision Number: 7

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions

Incompatible Products None known based on information supplied

Conditions to Avoid None known.

Hazardous Byproducts of Decomposition None expected

Hazardous Polymerization Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplies information.

Chemical Name	LD50 Oral	LD50 Dermal	LD50 Inhalation
Water	90 mL/kg (Rat)		
2-butoxyethanol	470 mg/kg (Rat)	220 mg/kg (Rat) 2270 mg/kg (Rabbit)	2.21 mg/L (Rat) 4h 450 ppm (rat) 4h
Sodium Bicarbonate	4220 mg/kg (Rat)		

Chronic Toxicity

Carcinogenicity

Chemical Name	ACGIH	IARC	NTP	OSHA
2-butoxyethanol	A3			

ACGIH: American Conference of Governmental Industrial Hygienists)

A3: Animal Carcinogen

Target Organ Effects Blood, Central Nervous System (CNS), Eyes, Hematopoietic System, Kidney, Liver, Respiratory System, Skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
2-butoxyethanol		LC50=1490 mg/L Lepomis macrochirus 96h		LC50 1698-1940 mg/L 24h EC50 = 1720 mg/L 24h
Sodium Bicarbonate	EC50 > 650mg/L 120h	LC50=8250-9000 mg/L Lepomis macrochirus 96h		EC50 = 2350 mg/L 48h

Chemical Name	Log Pow
2-butoxyethanol	=0.81 25A°C

MATERIAL SAFETY DATA SHEET

PRODUCT: Alcohol Free Lens Cleaning Liquid

Issue Date: 18 July 2006

Revision Date: 3 April 2013

Revision Number: 7

13. WASTE DISPOSAL

Waste Disposal Methods

This material as supplied is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Materials

Dispose of in accordance with local regulations.

14. TRANSPORTATION

DOT not regulated

TDG not regulated

MEX not regulated

ICAO not regulated

IATA not regulated

IMDG/IMO not regulated

RID not regulated

ADR not regulated

ADN not regulated

15. REGULATORY INFORMATION

International Inventories

TSC Complies

DSL Does not comply

EINECS/ELINCS Does not comply

ENCS Does not comply

IECSC Does not comply

KECL Does not comply

PICCS Does not comply

AICS Does not comply

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, part 372.

Chemical Name	CAS No.	% by Weight	SARA 313 - Threshold Values %
2-butoxyethanol	Proprietary	5-15	1.0

SARA 313 / 312 Hazard Categories

Acute Health Hazard Yes

Chronic Health Hazard Yes

Fire Hazard No

Sudden Pressure Release Hazard No

MATERIAL SAFETY DATA SHEET

PRODUCT: Alcohol Free Lens Cleaning Liquid

Issue Date: 18 July 2006

Revision Date: 3 April 2013

Revision Number: 7

Reactive Hazard

No

Clean Water Act

This Product does not contain any substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Sec. 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following substances which are listed hazardous air pollutants (HAPs) under Sec. 112 of the Clean Air Act.

Chemical Name	CAS No.	% by Weight	HAPs Data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
2-butoxyethanol	111-76-2	5 - 15		Group I		

CERCLA

This material as supplied does not contain any substances regulated as hazardous substances under the Comprehensive Environmental response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	MA	NJ	PA	IL	RI
2-butoxyethanol	X	X	X	X	X

International Regulations

Mexico – Grade

No information available

Chemical Name	Carcinogen Status	Exposure Limits
2-butoxyethanol		Mexico: TWA=400ppm Mexico: TWA=980 mg/m ³ Mexico: STEL=1225 mg/m ³ Mexico: STEL=500ppm

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR), and the MSDS contains all of the information required by the CPR.

WHMIS Hazard Class: none

This product contains the following substances:

Chemical Name	National Pollutant Release Inventory
2-butoxyethanol	X

MATERIAL SAFETY DATA SHEET

PRODUCT: Alcohol Free Lens Cleaning Liquid

Issue Date: 18 July 2006

Revision Date: 3 April 2013

Revision Number: 7

16. OTHER INFORMATION

Date of Issue 2 February 2009

Revision date 1 April 2013

Revision Note

Hazards and Emergency Overview

May be irritating to skin and eyes.
May cause irritation if swallowed.

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, release and disposal, and is not to be considered as a warranty or quality specification. The information related only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text of this MSDS. Personnel handling this material must make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of this material and the safety and health of employees and customers.

* * * END OF MATERIAL SAFETY DATA SHEET * * *

HOSPECO HEALTH GARDS METERED AIR FRESHENERS**BABY POWDER 07909; VERY VANILLA 07915; MANGO MADNESS 07917; FRESH LINEN 07918; FRUIT BASKET 07929; ORCHARD SPICE 07930; CITRUS GROVE 07931; FRESH GARDEN 07932;**

Quick Identifier (In Plant Common Name)

Material Safety Data Sheet

Manufacturer's Name & Address
HOSPECO
 26301 Curtiss-Wright Parkway
 Cleveland, Ohio 44143

Telephone No. 1-800-321-9832

HMIS Symbol:

Health	1
Flammability	3
Reactivity	0

HMIS	NFPA
Minimal 0	Insignificant
Slight 1	Slight
Moderate 2	Moderate
Serious 3	High
Severe 4	Extreme

NFPA Symbol:**Date Prepared:** May 23, 2012**Prepared By:** *V. Burnell***Supersedes:** NEW**SECTION 1 - IDENTITY**

Common Name: (used on label)
 (Trade name & Synonyms) **HOSPECO HEALTH GARDS AIR FRESHENERS:
 HG BABY POWDER 07909; VERY VANILLA 07915; MANGO MADNESS
 07917; FRESH LINEN 07918; FRUIT BASKET 07929; ORCHARD SPICE
 07930; CITRUS GROVE 07931; FRESH GARDEN 07932;**

Chemical Name Mixture packaged in pressurized aerosol spray can.

SECTION 2 - HAZARDOUS INGREDIENTS

Principal Hazardous Component(s)	CAS No.	OSHA PEL	ACGIH TLV	Other Limits
2-Propanone	67-64-1	1000 ppm	500 ppm 750 ppm STEL	
Liquefied Petroleum Gas	68476-86-8	Unknown	1000 ppm	

*Section 313 Supplier Notification - Indicates hazardous ingredients which are toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	>100°F	Specific Gravity (H₂O=1)(Conc)	0.78 – 0.81g/ml	Vapor Pressure (Propellant)	No Data
% - VOC	29.50%	Evaporation Rate (BuAc=1)	>1.00	pH	N/A
Solubility In Water	Insoluble	Appearance and Odor(Conc)	Water white clear liquid with a characteristic odor(s)		

SECTION 4 - FIRE & EXPLOSION DATA

Flammability (per flame projection)	FLAMMABLE	Flammable Limits in Air (Propellants)	Lower N/A	Upper N/A	Extinguisher Media	Dry chemical, CO ₂ , Alcohol-resistant foam
Special Fire Fighting Procedures	Keep containers cool using water spray. Use proper equipment to protect personnel from bursting containers.					
Unusual Fire and Explosion Hazards	Contents under pressure. Do not expose to temperatures exceeding 120° F as containers may vent, rupture or burst.					

SECTION 5 - PHYSICAL HAZARDS

Stability	Unstable <input type="checkbox"/> Stable <input checked="" type="checkbox"/>	Conditions to Avoid	Heat, sparks open flames; Temp. > 120°F.	Hazardous Polymerization	May Occur <input type="checkbox"/> Will not Occur <input checked="" type="checkbox"/>
Incompatibility (Materials to Avoid)	Acids, alkalis, Reducing agents, Strong oxidizing agents				
Hazardous Decomposition Products	CO and CO ₂				

SECTION 6 - HEALTH HAZARDS

Routes of Entry **Inhalation:** Yes **Eyes / Skin:** Yes **Ingestion:** Unlikely

Signs and Symptoms of Exposure (Acute & Chronic)

Eye contact: Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes; **Skin contact:** May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use. **Ingestion:** Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This can result into lung inflammation and other lung injury; **Inhalation:** Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects.

Medical Conditions

Generally Aggravated by Exposure Pre-existing skin and lung disorders

Chemical Listed as Carcinogen or Potential Carcinogen	National Toxicology Program	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	I.A.R.C. Monographs	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	OSHA	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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Emergency and First Aid Procedures

- 1. Inhalation** Immediately move to fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.
- 2. Eyes** Immediately move to fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.
- 3. Skin** Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.
- 4. Ingestion** Seek medical attention. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting.

SECTION 7 – SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type) None required for normal use.

Ventilation	Local Exhaust	Maintain adequate ventilation.	Mechanical (General)	N/A	Special	N/A	Other	N/A
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Protective Gloves Chemical Resistant **Eye Protection** Safety Glasses

Other Protective Clothing or Equipment Wash hands after use.

SECTION 8 – SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken Handling and Storage

WARNING: FLAMMABLE. Contents under pressure. Keep away from heat, sparks and open flames. Excessive inhalation in confined areas may cause headaches or dizziness. Intentional misuse by deliberately concentrating or inhaling the contents may be harmful or fatal. Avoid contact with skin and eyes. Avoid contact with food and food handling surfaces. Avoid contact with painted, varnished or plastic surfaces. Do not store at temperatures above 120°F. Do not puncture or incinerate containers. Keep out of reach of children. Store in accordance with **NFPA 30B for Level 3 Aerosols.**

Other Precautions Read label cautions carefully. Follow label directions to avoid injury.

Steps to be Taken in Case Material is Released or Spilled Absorb spill with inert material then place in a chemical waste container. Dispose of spill material in accordance with regulations.

Waste Disposal Methods Dispose of in accordance with local, state, and federal regulations.

Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986:
This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

Transportation Info

DOT CLASSIFICATION: HAZARDOUS **PACKING GROUP:** N/A
DESCRIPTION: CONSUMER COMMODITY, ORM-D
UN NUMBER: UN 1950 **HAZARD CLASS:** 2.1

We believe all information given is accurate. It is offered in good faith, but without guarantee. Since conditions are beyond our control, user assumes all responsibility and risk.

HYDROGEN PEROXIDE 3% SOLUTION

Product and Company Identification
Composition/Information on Ingredients
Hazards Identification
First Aid Measures
Fire Fighting Measures
Accidental Release Measures
Handling and Storage
Exposure Controls/Personal Protection

Physical and Chemical Properties
Stability and Reactivity
Toxicological Information
Ecological Information
Disposal Considerations
Transport Information
Regulatory Information
Other Information / Hazmat Info / Hazcom Label

MSDS Safety Information

TOP

FSC: 6505 NIIN: 00-153-8480 MSDS Date: 07/10/1990 MSDS Num: BGXST

Submitter: D DG Tech Review: 09/21/1990 Status CD: C

Product **HYDROGEN PEROXIDE 3% SOLUTION** MFN: 01
 ID:
 Article: N Kit N Part:

Responsible Party Cage: 0TH10
 Name: CUMBERLAND-SWAN, INC.

Address: ONE SWAN DRIVE Box: 129
 City: SMYRNA State: TN Zip: 37167

Country: US
 Info Phone Number: 615-459-8900

Emergency Phone Number: 615-459-8900

Preparer's Name: JAMES R.BEAVER

Proprietary Ind: N Review Ind: Y
 Published: Y Special Project CD: N

Contractor Summary

TOP

Cage:ATD-A Name:ATD AMERICAN CO. (215-576-1000)

Address:UNKNOWN State:NK Zip:00000
 City:UNKNOWN

Country:NK Phone:UNKNOWN

Cage:66611 Name:CMC INC. DBA CUMBERLAND MFG CO.

Address:ONE SWAN DRIVE

City:SMYRNA

State:TN

Zip:37167

Country:US

Phone:615-459-8900

Cage:0TH10 Name:CUMBERLAND-SWAN, INC

Address:ONE SWAN DRIVE

City:SMYMA

State:TN

Box:129

Zip:37167

Country:US

Phone:615-459-8900

= Item Description Information =

TOP

Item Manager: S9G

Item Name: HYDROGEN PEROXIDE TOPICAL SOLUTION,USP
Specification Number: NK Type/Grade/Class: NK

Unit of Issue: BT
UI Container Qty: 1.000 PT

Quantitative Expression: NK
Type of Container: BOTTLE

Ingredients

TOP

Cas: 7722-84-1

Code: M

RTECS #: MX0900000 Code: M

Name: HYDROGEN PEROXIDE (SARA III)

% Text: 3

Environmental Wt:
Other REC Limits: NOT ESTABLISHED

OSHA PEL: 1 PPM

Code: M

OSHA

Code:

ACGIH TLV: 1 PPM; 9192

Code: M

ACGIH N/P

Code:

EPA Rpt Qty:

STEL:

DOT Rpt

Qty:

Ozone Depleting Chemical: N

Cas: 7732-18-5

Code: M

RTECS #: ZC0110000 Code: M

Name: WATER

% Text: 97

Environmental Wt:
Other REC Limits: NOT ESTABLISHED

OSHA PEL: NOT ESTABLISHED	Code: M	OSHA STEL:	Code:
ACGIH TLV: NOT ESTABLISHED	Code: M	ACGIH N/P STEL:	Code:
EPA Rpt Qty:		DOT Rpt Qty:	

Ozone Depleting Chemical: N

Health Hazards Data [TOP](#)

LD50 LC50 Mixture LD50 (INH RAT) IS 2000 MG/M3/4H (90%)

Route Of Entry Inds - Inhalation:NO	Skin:NO	Ingestion:NO
Carcinogenicity Inds - NTP:NO	IARC:NO	OSHA:NO

Health Hazards Acute And Chronic

ACUTE: IRRITATING TO THE EYE.

Explanation Of Carcinogenicity

THIS PRODUCT IS NOT LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.

Signs And Symptions Of Overexposure

EYE IRRITATION.

Medical Cond Aggravated By Exposure

NONE

First Aid Information [TOP](#)

EYES: IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. SEE DOCTOR. SKIN: WASH WITH WATER. INHALATION: REMOVE VICTIM TO FRESH AIR. SEE DOCTOR. INGESTION: DRINK PLENTY OF WATER IMMEDIATELY TO DILUTE, BUT DO NOT ATTEMPT T O INDUCE VOMIING. SEEK IMMEDIATE MEDICAL ATTENTION.

Spill Release Procedures [TOP](#)

DILUTE WITH LARGE AMOUNTS OF WATER AND IF POSSIBLE, DIRECT SOLUTION TO DIKED AREA AND HOLD UNTIL DECOMPOSED. DISPOSE IN ACCORDANCE WITH LOCAL ENVIRONMENTAL REGULATIONS.

Neutralizing Agent

NOT APPLICABLE.

Waste Disposal Methods [TOP](#)

DILUTE WITH LARGE AMOUNTS OF WATER. IF LOCAL REGULATIONS PERMIT, WASH TO SEWER. IF LOCAL REGULATIONS DO NOT PERMIT WASTE TO GO TO SEWER, TREAT AS DIRECTED BY LOCAL AGENCY.

Handling and Storage Precautions [TOP](#)

STORE IN A COOL, DRY, WELL VENTILATED AREA. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. PROTECT CONTAINERS FROM PHYSICAL DAMAGE.

Other Precautions

DO NOT TAKE INTERNALLY. DO NOT BREATHE MIST. AVOID CONTACT WITH EYES. WASH THOROUGHLY AFTER HANDLING.

Fire and Explosion Hazard Information

TOP

Flash Point Method: N/P

Flash Point:

Flash Point Text: NONE

Autoignition Temp:

Autoignition Temp Text: NONE

Lower Limits: N/R

Upper Limits: N/R

Extinguishing Media

ANY BOTTLE SURROUNDED BY FIRE SHOULD BE FLOODED WITH WATER FOR COOLING.

Fire Fighting Procedures

FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRES. USE WATER SPRAY TO COOL NEARBY CONTAINERS.

Unusual Fire/Explosion Hazard

DECOMPOSITION RELEASES OXYGEN WHICH MAY INTENSIFY FIRE.

Control Measures

TOP

Respiratory Protection

NONE NORMALLY REQUIRED. NIOSH APPROVED RESPIRATOR IF EXPOSURE LEVELS ARE EXCEEDED.

Ventilation

LOCAL EXHAUST.

Protective Gloves

NONE NORMALLY REQUIRED

Eye Protection

CHEMICAL SAFETY GOGGLES

Other Protective Equipment

EYE WASH STATION.

Work Hygienic Practices

OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES.

Supplemental Safety and Health

AVOID PROLONGED OR REPEATED EXPOSURE. DO NOT GET IN EYES. DO NOT

BREATHE VAPORS OR MISTS.

Physical/Chemical Properties

TOP

HCC: N1

NRC/State LIC No: N/R

Net Prop WT For Ammo: N/R

Boiling Point:

B.P. Text: 214F,101C

Melt/Freeze Pt:

M.P/F.P Text: UNKNOWN

Decomp Temp:

Decomp Text: UNKNOWN

Vapor Pres: 10.1

Vapor Density: UNKNOWN

Volatile Org Content %:

Spec Gravity: 1.0

VOC Pounds/Gallon:

PH: 6

VOC Grams/Liter:

Viscosity: UNKNOWN

Evaporation Rate & <1 (WATER = 1)

Reference:

Solubility in Water: COMPLETE

Appearance and Odor: COLORLESS, ODORLESS LIQUID.

Percent Volatiles by Volume: 100

Corrosion Rate: UNKNOWN

Reactivity Data

TOP

Stability Indicator: YES

Stability Condition To Avoid: EXCESSIVE HEAT

Materials To Avoid: STRONG REDUCING AGENTS, RUST, DIRT,
ORGANIC MATERIALS WITH A PH ABOVE 4.

Hazardous Decomposition NOT APPLICABLE

Products:

Hazardous Polymerization NO

Indicator:

Conditions To Avoid NOT APPLICABLE

Polymerization:

Toxicological Information

TOP

Toxicological Information: N/P

Ecological Information

TOP

Ecological: N/P

MSDS Transport Information

TOP

Transport Information: N/P

Regulatory Information

TOP

Sara Title III Information: N/P

Federal Regulatory Information: N/P

State Regulatory Information: N/P

Other Information

TOP

Other N/P Information:

HMIS Transportation Information

TOP

Responsible Party Cage: 0TH10

Trans ID NO: 51733

Product ID: HYDROGEN PEROXIDE 3% SOLUTION

MSDS Prepared Date: 07/10/1990

Review Date: 09/11/1996

MFN: 1

Submitter: D DG

Status C

CD:

Article W/O MSDS: N

Radioactivity: N/R

Tech Entry NOS Shipping Nm:

Form:

Net Explosive Weight: N/R

Coast Guard AMMO Code: N/R

Magnetism: N/P

Net Unit Weight: 1.0

POUND

AF MMAC Code:

DOD Exemption NUM: N/R

Limited Quantity IND:

Multiple KIT Number: 0

Kit Part IND: N

Kit IND: N

Review IND: Y

Unit Of Issue: BT

Type Of Container: BOTTLE

Container QTY: 1.000 PT

Additional Data: 3% SOLUTION OF HYDROGEN PEROXIDE,
STABILIZED.

Detail DOT Information

TOP

DOT PSN Code: ZZZ

Symbols: N/R

DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

DOT PSN Modifier:

Hazard Class: N/R

UN ID Num: N/R

DOT Packaging Group: N/R

Label: N/R
Special Provision: N/R
Packaging Exception: N/R

Non Bulk Pack: N/R
Max Qty Pass: N/R

Bulk Pack: N/R
Max Qty N/R
Cargo:

Vessel Stow Req: N/R
Water/Ship/Other Req: N/R

Detail IMO Information

[TOP](#)

IMO PSN Code: ZZZ

IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION
IMO PSN Modifier:

IMDG Page Number: N/R
UN Hazard Class: N/R

UN Number: N/R
IMO Packaging Group: N/R

Subsidiary Risk Label: N/R
EMS Number: N/R

MED First Aid Guide NUM: N/R

Detail IATA Information

[TOP](#)

IATA PSN Code: ZZZ

IATA UN ID NUM: N/R

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

IATA PSN Modifier:

IATA UN Class: N/R

Subsidiary Risk N/R
Class:

IATA Label: N/R
UN Packing Group: N/R

Packing Note Passenger: N/R

Max Quant Pass: N/R
Packaging Note Cargo: N/R

Max Quant Cargo: N/R
Exceptions: N/R

Detail AFI Information

[TOP](#)

AFI PSN Code: ZZZ

AFI Symbols:

AFI Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
AFI PSN Modifier:

AFI Hazard Class: N/R
AFI Packing Group: N/R

AFI UN ID NUM: N/R

AFI Label: N/R

Special Provisions: N/A

Back Pack Reference: N/A

HMIS HAZCOM Label

TOP

Product ID: HYDROGEN PEROXIDE 3% SOLUTION

Cage: 0TH10

Assigned IND: N

Company CUMBERLAND-SWAN, INC

Name:

Street: ONE SWAN DRIVE

PO Box: 129

City: SMYMA

State: TN

Zipcode: 37167

Country: US

Health Emergency Phone: 615-459-8900

Label Required IND: N

Date Of Label Review: 09/11/1996

Status Code: C

MFG Label NO: N/R

Label Date: 09/11/1996

Year Procured: 1990

Origination Code: F

Chronic Hazard IND: N

Eye Protection IND: YES

Skin Protection IND: N/P

Signal Word: CAUTION

Respiratory Protection IND: N/P

Health Hazard: None

Contact Hazard: None

Fire Hazard: None

Reactivity Hazard: Slight

Hazard And Precautions

N/P

This information is derived from the Hazardous Material Information System which is utilized by the U.S. Department of Defense. IntraWEB, LLC and its Distributors in no manner whatsoever, expressly or implied warrants, states, or intends said information to have any application use or viability by or to any person or persons. Any person utilizing this information should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.

MATERIAL SAFETY DATA SHEET

Page 1 of 4

MSDS # 110338037

PLEDGE® AEROSOL - LEMON

Date Issued: 03Feb1999

Supersedes: 19Feb1996

US MANUFACTURER:
 S.C. Johnson & Son, Inc.
 Phone: (800) 725-6737
 Racine, Wisconsin 53403-2236
 Emergency Phone: (888) 779-7920
 International Emergency Phone:
 (262) 886-1480

CANADIAN MANUFACTURER:
 S.C. Johnson and Son, Limited
 Phone: (800) 725-6737
 1 Webster Street
 Brantford, Ontario N3T 5R1
 Transportation Emergency:
 CANUTEC (collect) (613) 996-6666
 Poison Control: (888) 779-7920

HAZARD RATING	HMIS	HAZARD	NFPA
4-Very High	0	Health	0
3-High	4	Flammability	4
2-Moderate	0	Reactivity	0
1-Slight		Special	
0-Insignificant			

DISTRIBUTED IN CANADA BY:
 S.C. Johnson and Son, Limited
 Phone: (800) 725-6737
 1 Webster Street
 Brantford, Ontario N3T 5R1

----- SECTION 1 - PRODUCT IDENTIFICATION -----

PRODUCT NAME..... PLEDGE® AEROSOL - LEMON
 REASON FOR CHANGE..... No significant changes.
 PRODUCT USE..... Furniture care

UPC	SCJ CODE	QUANTITY	US SIZE	CANADIAN SIZE
62300 00332	21009	12		200 GM
62300 00334	21010	12		350 GM
62300 00329	329	12		500 GM
19800 08399	329	12	20 oz	
46500 00338	329	12	12.5 oz	

----- SECTION 2 - INGREDIENT INFORMATION -----

INGREDIENT	WEIGHT%	EXPOSURE LIMIT/TOXICITY
Silicones (CAS# 63148-62-9).....	3-7	NOT ESTABLISHED
Butane (CAS# 106-97-8).....	1-5	800 ppm ACGIH/OSHA TWA
Isobutane (CAS# 75-28-5).....	1-5	NOT ESTABLISHED
Propane (CAS# 74-98-6).....	1-5	1000 ppm OSHA PEL
Isoparaffinic Hydrocarbon Solvent..... (CAS# 68920-06-9)	5-10	NOT ESTABLISHED
Water (CAS# 7732-18-5).....	65-80	NOT ESTABLISHED

----- SECTION 3 - HEALTH HAZARDS IDENTIFICATION (Also See Section 11) -----

ROUTE(S) OF ENTRY..... Skin contact. Ingestion.
 EFFECTS OF ACUTE EXPOSURE:
 EYE..... May cause: Sensation of irritation.
 SKIN..... None known.
 INHALATION..... None known.
 INGESTION..... Aspiration into the lungs may cause severe health effects.
 MEDICAL CONDITIONS..... None known.
 GENERALLY RECOGNIZED
 AS BEING AGGRAVATED
 BY EXPOSURE

MATERIAL SAFETY DATA SHEET

Page 2 of 4

MSDS # 110338037

PLEDGE® AEROSOL - LEMON

Date Issued: 03Feb1999

Supersedes: 19Feb1996

SECTION 4 - FIRST AID MEASURES

EYE CONTACT..... Rinse with plenty of water.
SKIN CONTACT..... Wash contaminated area with water and soap.
INHALATION..... Remove to fresh air.
INGESTION..... Immediately drink 1-2 glasses of water or milk. Seek immediate medical attention.

SECTION 5 - FIRE AND EXPLOSION INFORMATION

FLASH POINT..... < 20°F (< -7°C) (TCC) (propellant)
FLAMMABLE LIMITS..... Not available.
AUTOIGNITION..... Not applicable.
TEMPERATURE
EXTINGUISHING MEDIA.... Foam. CO2. Dry chemical. Water fog.
SPECIAL FIREFIGHTING... Fight fire from maximum distance or protected area. Cool and use caution when approaching or handling fire-exposed containers. Fire fighters should wear self-contained breathing apparatus and protective clothing.
PROCEDURES
UNUSUAL FIRE AND..... Aerosol product - Containers may rocket or explode in heat of
EXPLOSION HAZARDS fire.

SECTION 6 - PREVENTIVE RELEASE MEASURES

STEPS TO BE TAKEN IN... Eliminate all ignition sources. Absorb with oil-dri or similar
CASE MATERIAL IS inert material. Sweep or scrape up and containerize. Rinse
RELEASED OR SPILLED affected area thoroughly with water.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONARY..... CAUTION: FLAMMABLE: Contains: petroleum distillate. CONTENTS
INFORMATION UNDER PRESSURE. Do not use near open fire, flames or heat. Do not puncture or incinerate. Do not store at temperatures above 120 °F (50 °C). Do not spray or use on floors. Keep out of reach of children.
OTHER HANDLING AND..... Store in a cool, dry place with adequate ventilation. Keep from
STORAGE CONDITIONS freezing.

SECTION 8 - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION. No special requirements under normal use conditions.
VENTILATION..... No special requirements.
PROTECTIVE GLOVES..... No special requirements under normal use conditions.
EYE PROTECTION..... No special requirements under normal use conditions.
OTHER PROTECTIVE..... No special requirements.
MEASURES

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

COLOR..... Opaque
PRODUCT STATE..... Dispensed as a spray mist.
ODOR..... Lemon
pH..... Not applicable.
ODOR THRESHOLD..... Not available.
SOLUBILITY IN WATER.... Dispersible
SPECIFIC GRAVITY..... 0.828
(H2O=1)
VAPOR DENSITY (AIR=1).. Not available.

MATERIAL SAFETY DATA SHEET

PLEDGE® AEROSOL - LEMON

Date Issued: 03Feb1999

Supersedes: 19Feb1996

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES (continued)

EVAPORATION RATE (BUTYL ACETATE=1) Not available.
VAPOR PRESSURE (mm HG). Not available.
BOILING POINT..... Not applicable.
FREEZING POINT..... Not applicable.
COEFFICIENT OF..... Not available.
WATER/OIL
PERCENT VOLATILE BY.... Not available.
VOLUME (%)
VOLATILE ORGANIC..... Hydrocarbon propellant Isoparaffinic Hydrocarbon.
COMPOUND (VOC)
THEORETICAL VOC..... 1.44-1.46 lb/gal
(LB/GAL)

SECTION 10 - STABILITY AND REACTIVITY

STABILITY..... Stable
STABILITY - CONDITIONS. Not applicable.
TO AVOID
INCOMPATIBILITY..... No special requirements.
HAZARDOUS DECOMPOSITION PRODUCTS No special requirements.
HAZARDOUS..... Will not occur.
POLYMERIZATION
HAZARDOUS..... Not applicable.
POLYMERIZATION -
CONDITIONS TO AVOID

SECTION 11 - TOXICOLOGY INFORMATION (Also See Section 3)

LD50 (ACUTE ORAL TOX).. Greater than 5000 mg/kg (rats)
LD50 (ACUTE DERMAL TOX) Not applicable.
LC50 (ACUTE INHALATION. Not applicable.
TOX)
EFFECTS OF CHRONIC..... None known.
EXPOSURE
SENSITIZATION..... None known.
CARCINOGENICITY..... None known.
REPRODUCTIVE TOXICITY.. None known.
TERATOGENICITY..... None known.
MUTAGENICITY..... None known.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA..... Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL..... If possible, recycle empty aerosol can to nearest steel
INFORMATION recycling center. Use up package or give to someone who can.

MATERIAL SAFETY DATA SHEET

PLEDGE® AEROSOL - LEMON

Date Issued: 03Feb1999

Supersedes: 19Feb1996

----- SECTION 14 - TRANSPORTATION INFORMATION -----

US DOT INFORMATION..... Buffing or polishing compounds, N.O.I. Consumer commodity, ORM-D
CANADIAN SHIPPING NAME. LEMON PLEDGE
TDG CLASSIFICATION..... Not applicable.
PIN/NIP..... Not applicable.
PACKING GROUP..... Not applicable.
EXEMPTION NAME..... Consumer commodity

----- SECTION 15 - REGULATORY INFORMATION -----

WHMIS CLASSIFICATION... Non-regulated.

All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

All ingredients in this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

This product is not subject to the reporting requirements under California's Proposition 65.

----- SECTION 16 - OTHER INFORMATION -----

ADDITIONAL INFORMATION. NFPA 30B Level 1 Aerosol.
EPA REGISTRATION #..... Not applicable.

----- PREPARATION INFORMATION -----

PREPARED BY..... Manufacturer's Technical Support Department. Refer to page 1
(Manufacturer) for contact information.

This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained herein. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

PRINT DATE: 04May2000

MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: McKesson Hydrogen Peroxide 3%, USP

MFR #: 23-F0010 (4 oz.)
23-D0012 (16 oz.)
23-A0013 (1 Gallon)

DISTRIBUTED BY: McKesson Medical-Surgical Inc.
8741 Landmark Road
Richmond, VA 23228

INFORMATION LINE: 1-800-777-4908

EMERGENCY PHONE: 1-800-424-9300 (CHEMTREC)

PRODUCT DESCRIPTION: N/A

SECTION 2: COMPOSITION/INFORMATION OF INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>%</u>	<u>Exposure Limits</u>
Hydrogen Peroxide, USP	7722-84-1	3%	OSHA PEL—1 ppm ACGIH TLV—1 ppm

SECTION 2 NOTES: N/A

SECTION 3: HAZARDS IDENTIFICATION

ROUTES OF ENTRY: Inhalation, Skin

POTENTIAL HEALTH EFFECTS:

EYES: Minimally irritating to the eyes

SKIN: Mildly irritating to the skin

INGESTION: N/A

INHALATION: Inhalation of vapors and mists irritate the nose and throat

ACUTE HEALTH HAZARDS: N/A

CHRONIC HEALTH HAZARDS: N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None reported

CARCINOGENICITY

OSHA: N/A

ACGIH: N/A

NTP: N/A

IARC: N/A

OTHER: N/A

SECTION 3 NOTES: N/A

SECTION 4: FIRST-AID MEASURES

EYES: Flush with plenty of water, call physician.

SKIN: Flush with water.

INGESTION: If swallowed, get medical help or contact a poison control center right away.

INHALATION: N/A

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: N/A

SECTION 4 NOTES: N/A

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: N/A
(% BY VOLUME) LOWER: N/A

FLASH POINT: N/A
METHOD USED: N/A

AUTOIGNITION TEMPERATURE: N/A

NFPA HAZARD CLASSIFICATION

HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 0
OTHER: 0

HMS HAZARD CLASSIFICATION

HEALTH: N/A FLAMMABILITY: N/A REACTIVITY: N/A
PROTECTION: N/A

EXTINGUISHING MEDIA: Flood with water or water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Fire Fighters should wear Self-Contained Breathing Apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

HAZARDOUS DECOMPOSITION PRODUCTS: Oxygen, which supports combustion

SECTION 5 NOTES: N/A

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Flush with water; wear rubber boots, and rubber apron and goggles.

SECTION 6 NOTES: N/A

SECTION 7: HANDLING AND STORAGE

HANDLING: Do not shake bottle. Hold away from face when opening. Avoid extreme heat.

STORAGE: Keep tightly closed in a cool, dark place.

OTHER PRECAUTIONS: For external use only. Keep out of reach of children.

SECTION 7 NOTES: N/A

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

VENTILATION: N/A

RESPIRATORY PROTECTION: Avoid breathing vapors.

EYE PROTECTION: Goggles if desired.

SKIN PROTECTION: Rubber or vinyl gloves if desired.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A

WORK HYGIENIC PRACTICES: Handle carefully; avoid spilling.

EXPOSURE GUIDELINES: N/A

SECTION 8 NOTES: N/A

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR: Colorless, Clear Liquid; No odor.**PHYSICAL STATE:** Liquid**pH AS SUPPLIED:** N/A**pH (Other):** N/A**BOILING POINT:** 212°F**MELTING POINT:** N/A**FREEZING POINT:** N/A**VAPOR PRESSURE (mmHg):** 23

@ N/A

VAPOR DENSITY (AIR = 1): N/A

@ N/A

SPECIFIC GRAVITY (H₂O = 1): 1.1

@ N/A

EVAPORATION RATE: >1**BASIS (=1):** N/A**SOLUBILITY IN WATER:** Completely Soluble**PERCENT SOLIDS BY WEIGHT:** N/A**PERCENT VOLATILE:** N/A

BY WT/ N/A BY VOL @ N/A

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

WITH WATER:	N/A	LBS/GAL
WITHOUT WATER:	N/A	LBS/GAL

MOLECULAR WEIGHT: N/A**VISCOSITY:** N/A

@ N/A

SECTION 9 NOTES: N/A

SECTION 10: STABILITY AND REACTIVITY

STABLE**UNSTABLE****STABILITY:** X**CONDITIONS TO AVOID (STABILITY):** Keep in a cool, dark place**INCOMPATIBILITY (MATERIAL TO AVOID):** Reducing agents, combustible materials**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Oxygen, which supports combustion**HAZARDOUS POLYMERIZATION:** Will not occur**CONDITIONS TO AVOID (POLYMERIZATION):** Extreme heat and contamination

SECTION 10 NOTES: N/A

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: N/A

SECTION 11 NOTES: N/A

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: N/A

SECTION 12 NOTES: N/A

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Biodegradable, non-hazardous to environment.

RCRA HAZARD CLASS: N/A

SECTION 13 NOTES: N/A

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: N/A
HAZARD CLASS: N/A
DOT SHIPPING ID NUMBER: N/A
DOT PACKING GROUP: N/A
DOT LABEL STATEMENT: N/A

WATER TRANSPORTATION

PROPER SHIPPING NAME: N/A
HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENTS: N/A

AIR TRANSPORTATION

PROPER SHIPPING NAME: N/A
HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENTS: N/A

SECTION 14 NOTES: N/A

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): N/A

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): N/A

311/312 HAZARD CATEGORIES: N/A

313 REPORTABLE INGREDIENTS: N/A

STATE REGULATIONS: N/A

INTERNATIONAL REGULATIONS: N/A

SECTION 15 NOTES: N/A

SECTION 16: OTHER INFORMATION



MSDS DATE: 06/04/2013

OTHER INFORMATION: N/A

PREPARATION INFORMATION: N/A

DISCLAIMER: This information relates onto to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. The information and recommendations contained herein are to the best of the manufacturer's knowledge and belief accurate and reliable as of the date indicated. No representation warranty or guarantee, however, is made with regards to accuracy, reliability or completeness. Conditions of use of the material are under the control of the user; therefore, it is the user's responsibility to satisfy itself as to the suitability and completeness of such information for its own particular use. Appropriate warnings and safe-handling procedures should be provided to handlers and users.

MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: McKesson Instant Hand Sanitizer

MFR #: 53-28032 (4 oz.)
53-28033 (8 oz.)
53-28037 (15 oz.)
53-28036-1000 (1L)

DISTRIBUTED BY: McKesson Medical-Surgical Inc.
8741 Landmark Road
Richmond, VA 23228

INFORMATION LINE: 1-800-777-4908

EMERGENCY PHONE: 1-800-424-9300 (CHEMTREC)

PRODUCT DESCRIPTION: A gelled alcohol hand sanitizer for hand washing to decrease bacteria on the skin.

SECTION 2: COMPOSITION/INFORMATION OF INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>%</u>	<u>Exposure Limits</u>
Denatured Ethyl Alcohol	64-17-5	70% (v/v)	OSHA PEL: 1000 ppm ACHIH TLV: 1000 ppm

SECTION 2 NOTES: N/A

SECTION 3: HAZARDS IDENTIFICATION

ROUTES OF ENTRY: Eyes, Ingestion, Inhalation

POTENTIAL HEALTH EFFECTS:

EYES: Possible watering, burning and redness.

SKIN: N/A

INGESTION: Possible gastrointestinal irritation or disturbance.

INHALATION: Possible giddiness or loss of consciousness.

ACUTE HEALTH HAZARDS: May cause mild eye irritation with exposure. May be harmful if swallowed.

CHRONIC HEALTH HAZARDS: N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known.

CARCINOGENICITY

OSHA: N/A

ACGIH: N/A

NTP: N/A

IARC: N/A

OTHER: N/A

SECTION 3 NOTES: N/A

SECTION 4: FIRST-AID MEASURES

EYES: Flush with clear water for 15 minutes.

SKIN: N/A

INGESTION: If patient is conscious and alert, dilute by drinking large quantities of water. Allow vomiting to occur, and then get medical attention. *Always get medical attention when product is swallowed or when signs and/or symptoms are significant or persist.*

INHALATION: Remove to fresh air.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: N/A

SECTION 4 NOTES: N/A

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: N/D
(% BY VOLUME) LOWER: N/D

FLASH POINT: 70°F
METHOD USED: SETA

AUTOIGNITION TEMPERATURE: N/A

NFPA HAZARD CLASSIFICATION

HEALTH: N/A **FLAMMABILITY:** N/A **REACTIVITY:** N/A **OTHER:** N/A

HMIS HAZARD CLASSIFICATION

HEALTH: 0 **FLAMMABILITY:** 3 **REACTIVITY:** 0 **PERSONAL:** 0

EXTINGUISHING MEDIA: Carbon Dioxide, alcohol-type foam, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: NIOSH approved respirator should be worn by firefighters. Use water spray to cool equipment and to disperse vapors. Alcohol flames may be difficult to see because they are virtually colorless.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors from this product may travel or move by air currents to an ignition source and flash back.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide from burning.

SECTION 5 NOTES: Hazard Ratings: 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Extreme, A = Safety Glasses, B= Safety Glasses & Gloves

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Small spills (< 1 gallon) may be washed down a drain or cleaned up and disposed of into a sanitary sewer system. Large spills (> 1 gallon) should be contained and collected (by absorption or vacuuming) then disposed of properly.

SECTION 6 NOTES: N/A

SECTION 7: HANDLING AND STORAGE

HANDLING: Do not contaminate water, food or feed. Do not reuse empty containers. Keep containers clean and closed.

STORAGE: KEEP OUT OF REACH OF CHILDREN.

OTHER PRECAUTIONS: N/A

SECTION 7 NOTES: N/A

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

VENTILATION: Mechanical Ventilation (General) – Normally Sufficient; Local Exhaust – Not normally needed

RESPIRATORY PROTECTION: Not needed. General ventilation is normally adequate.

EYE PROTECTION: Not needed. Avoid putting product into eyes while washing hands.

SKIN PROTECTION: Not needed; this product is a hand sanitizer.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A

WORK HYGIENIC PRACTICES: Do not get into eyes. May be harmful if swallowed. Protect food and drink from contamination by product.

EXPOSURE GUIDELINES: Denatured Ethyl Alcohol - OSHA PEL: 1000 ppm; ACHIH TLV: 1000 ppm

SECTION 8 NOTES: N/A

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR: A clear gel with a pleasant and alcohol odor.

PHYSICAL STATE: Gel

pH (READY-TO-USE): 6.00—8.00

pH (Other): N/A

BOILING POINT: 212°F

MELTING POINT: N/A

FREEZING POINT: N/A

VAPOR PRESSURE (mmHg): N/A

@ N/A

DENSITY (lb./gallon): 7.15 to 7.35 lb./gal

@ 25°C

SPECIFIC GRAVITY (H₂O = 1): N/A

@ N/A

EVAPORATION RATE: N/A

BASIS (=1): N/A

SOLUBILITY IN WATER: Complete

PERCENT SOLIDS BY WEIGHT: N/A

PERCENT VOLATILE: N/A

BY WT/ N/A BY VOL @ N/A

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

WITH WATER: N/A LBS/GAL

WITHOUT WATER: N/A LBS/GAL

MOLECULAR WEIGHT: N/A

VISCOSITY: 6,000—10,000 cps

@ N/A

SECTION 9 NOTES: N/A

SECTION 10: STABILITY AND REACTIVITY

STABLE

UNSTABLE

STABILITY: X

CONDITIONS TO AVOID (STABILITY): Incompatible materials.

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizers such as Hydrogen Peroxide, Bromine and Chromic Acid.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon Monoxide and Carbon Dioxide from burning.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 10 NOTES: N/A

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: N/A

SECTION 11 NOTES: N/A

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: N/A

SECTION 12 NOTES: N/A

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: This product is considered a RCRA Hazardous Waste (due to flammability) as identified in Federal Regulations 40 CFR 261. Dispose of product by using in accordance with label directions or in compliance with local, state, and federal laws and regulations (contact local or state environmental agency for specific rules).

RCRA HAZARD CLASS: N/A

SECTION 13 NOTES: N/A

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: Limited Quantity or Consumer Commodity (ORM-D) in packaging sizes 1L and less

HAZARD CLASS: Flammable Liquid, 3

DOT SHIPPING ID NUMBER: UN1170

DOT PACKING GROUP: PGII

DOT LABEL STATEMENT: Limited Quantity or ORM-D as packaged

WATER TRANSPORTATION

PROPER SHIPPING NAME: N/A

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENTS: N/A

AIR TRANSPORTATION

PROPER SHIPPING NAME: N/A

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENTS: N/A

SECTION 14 NOTES: N/A

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): N/A

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): N/A

SARA 311/312 HAZARD CATEGORIES: N/A

SARA 313 REPORTABLE INGREDIENTS: Contains NO hazardous ingredients subject to reporting requirements of Section 313 of SARA Title II (Emergency Planning and Community Right-to-Know Act).

STATE REGULATIONS: N/A

INTERNATIONAL REGULATIONS: N/A

SECTION 15 NOTES: N/A

SECTION 16: OTHER INFORMATION

OTHER INFORMATION: N/A

PREPARATION INFORMATION: N/A

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MATERIAL SAFETY DATA SHEET

ENVIROCID

Surface Disinfectant/Decontaminant Cleaner

1 - IDENTIFICATION

Manufacturer: Metrex Research
Address: 28210 Wick Road
City, State, Zip: Romulus, MI 48174
Telephone: 1-800-841-1428
Emergency: Chemtrec 1- 800-424-9300
Date Prepared: August 2009

2 - COMPOSITION INFORMATION

Hazardous Ingredients

	<u>CAS #</u>	<u>PEL</u>	<u>TLV</u>	<u>%</u>
Isopropanol	67-63-0	400ppm	N/A	10-20
Ethylene Glycol Monobutyl Ether	111-76-2	50ppm	25ppm	1-5

Other Ingredients

Water and other inert ingredients

3 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 191 °F
Specific Gravity (H₂O = 1): 0.970 at 25 °C
Vapor Pressure (mm Hg): Similar to water
Vapor Density (AIR = 1): Similar to water
Freezing/Melting Point: -10°C
Solubility in Water: 100%
Appearance and Odor: Clear to amber liquid with minty odor
pH: 11.00 - 12.49

4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): 83°F (ASTM D-93) Closed Cup
Flammable Limits: LEL: N/A **UEL:** N/A
Extinguishing Media: Carbon dioxide, dry chemical, foam
Special Fire Fighting Procedures: N/A
Unusual Fire and Explosion Hazards: N/A

5 - REACTIVITY DATA

Stability: Stable solution
Conditions to Avoid: Avoid temperatures above 120°F and evaporation of water.
Incompatibility (Material to Avoid): Acids
Hazardous Decomposition Byproducts: Oxides of carbon
Hazardous Polymerization: Will not occur.

6 - HEALTH HAZARD DATA

Routes of Entry:
Skin: Not considered an irritant.
Eyes: Contact with eyes can cause reversible damage.
Inhalation: Low or mild irritation
Ingestion: May be harmful if swallowed.
Carcinogenicity - NTP: No
IARC Monographs: No **OSHA Regulated Carcinogen:** No

7 - EMERGENCY FIRST AID PROCEDURES

Skin: Wash skin with soap and water.
Eyes: Flush with water for 15 minutes. If irritation persists, seek medical attention.
Inhalation: Remove to fresh air. If irritation persists, seek medical attention.
Ingestion: Do not induce vomiting. Give large amounts of water. Seek medical attention.

8 - PRECAUTIONS FOR SAFE HANDLING & USE

Steps to be taken in case material is released or spilled: Ventilate area. Wipe or absorb with inert material and transfer to suitable container for disposal in accordance with federal, state and local regulations.
Waste Disposal Method: Wastes resulting from the use of this product must be disposed of in accordance with federal, state, and local regulations. Triple rinse empty container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration or, if allowed by state and local authorities, by burning. If burned, keep out of smoke.
Precautions to be taken in Handling and Storing: Store product in original sealed container at room temperature.
Other Precautions: Keep out of reach of children. Do not ingest. Avoid eye contact and contamination of food.

9 - CONTROL MEASURES

Respiratory Protection: Use in a well-ventilated area.
VENTILATION:
Local Exhaust: Adequate ventilation to maintain recommended exposure limit.
Mechanical (General): Should be sufficient
Protective Gloves: Not required if used as directed.
Eye Protection: Not required if used as directed.
Work/Hygiene Practices: Handle in accordance with good personal hygiene and safety practices. These practices include avoiding unnecessary exposure.

10 - TRANSPORTATION INFORMATION

DOT:

This product is not regulated by DOT for ground transportation under the aqueous alcohol exemption per 49 CFR 173.150 (E)(1)(2).

IATA, IMO:

Proper Shipping Name: Alcohol n.o.s. (Isopropanol, aqueous solution)
Hazard Class: 3
Identification Number: 1987
Packaging Group: III
Label: Flammable Liquid

11 - SPECIAL INFORMATION

HMIS (Hazardous Material Identification System) Rating:
H1 F2 R0
[HMIS Hazard Index: 4 – Severe Hazard; 3 – Serious Hazard;
2 – Moderate Hazard; 1 – Slight Hazard; 0 – Minimum Hazard]

Note: This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is to be used only for this product. The information contained in this MSDS is, to the best of our knowledge, believed to be accurate.

Material Safety Data Sheet

Molybdenum Tungsten Solid Metal

1. Product and company identification

Product name	: Molybdenum Tungsten Solid Metal
Material uses	: Furnace Construction.
Manufacturer	: H.C. Starck Inc. 1250 East 222nd Street, Euclid, Ohio 44117, USA T 1.216.692.3990
Validation date	: 6/3/2011.
Responsible name	: Atrion Regulatory Services, Inc.
In case of emergency	: GENERAL INFORMATION - +617-584-4569 [8:00 a.m - 6:00 p.m EST] CHEMTREC (US, Transportation) - 800-424-9300 [24h] CHEMTREC (International, Transportation) - +703-527-3887 [24h]
e-mail address of person responsible for this SDS	: msdsus@hcstarck.com
Product type	: Massive metal.

2. Hazards identification

Physical state	: Solid.
Appearance	: Bar. / Disc. / Rod. / Scrap. / Sheet.
Odor	: Odorless.
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview	: CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. <input checked="" type="checkbox"/> Keep away from heat, sparks and flame. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat. Under normal conditions of use this product is non-hazardous. However, if this product is ground or otherwise processed those ingredients mentioned in Section 3 could be generated.
Routes of entry	: Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects	
Inhalation	: Not applicable.
Ingestion	: Not applicable.
Eyes	: Not applicable.
Potential chronic health effects	
Chronic effects	: Contains material that may cause target organ damage, based on animal data.
Target organs	: Contains material which may cause damage to the following organs: blood, kidneys, lungs, liver, upper respiratory tract, skin, eyes.
Medical conditions aggravated by over-exposure	: Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
See toxicological information (section 11)	

3. Composition/information on ingredients

Name	CAS number	%
Molybdenum	7439-98-7	60-70
Tungsten	7440-33-7	27-33

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

- Eye contact** : Get medical attention if any damage to the eye is caused by the metal. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Cuts should be treated promptly and covered. Get medical attention if symptoms occur.
- Inhalation** : Move exposed person to fresh air. Get medical attention immediately. Get medical attention if symptoms occur.
- Ingestion** : Not applicable.

5. Fire-fighting measures

- Flammability of the product** : No specific fire or explosion hazard.
- Extinguishing media**
- Suitable** : Dry powder type agents specially designed for metal powder fires.
- Not suitable** : Water and Carbon dioxide (CO₂).
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
metal oxide/oxides
Molybdenum trioxide.
- Special protective equipment for fire-fighters** : No special protection is required.
- Special remarks on fire hazards** : Dust and Fumes from this product may be a fire and explosion hazard when exposed to high temperatures or ignition sources. Particle size and dispersion in air determine reactivity.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering.
- Environmental precautions** : No specific hazard.
- Methods for cleaning up**
- Small spill** : Restack safely. Take care with items that are sharp or heavy.
- Large spill** : Restack safely. Take care with items that are sharp or heavy. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Take care with items that are sharp or heavy.
- Storage** : Store in accordance with local regulations. Unlimited shelf life in tightly closed containers.

8. Exposure controls/personal protection

United States

Ingredient	Exposure limits
Molybdenum	ACGIH TLV (United States, 1/2009). TWA: 3 mg/m ³ , (as Mo) 8 hour(s). Form: Insoluble
Tungsten	Not available.

Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			Notations
Ingredient	List name	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	
Molybdenum, as Mo	US ACGIH 1/2009	-	3	-	-	-	-	-	-	-	[a]
	AB 4/2009	-	3	-	-	-	-	-	-	-	[b]
Molybdenum	BC 9/2009	-	10	-	-	-	-	-	-	-	[c]
		-	3	-	-	-	-	-	-	-	[b]
Molybdenum, as molybdenum	ON 8/2008	-	10	-	-	-	-	-	-	-	[d]
		-	3	-	-	-	-	-	-	-	[e]
Tungsten, as W	AB 4/2009	-	5	-	-	10	-	-	-	-	[3]
	BC 9/2009	-	5	-	-	10	-	-	-	-	[3]

[3]Skin sensitization

Form: [a]Insoluble [b]Respirable [c]Inhalable [d]The notation "inhalable" following the name of an agent in this Schedule means that size fraction of the airborne particulate deposited anywhere in the respiratory tract and collected during air sampling with a particle size-selective device that, (a) meets the American Conference of Governmental Industrial Hygienists (ACGIH) particle size-selective criteria; and (b) has the cut point of 100 microns at 50 per cent collective efficiency. [e]The notation "respirable" following the name of an agent in this Schedule means that size fraction of the airborne particulate deposited in the gas-exchange region of the respiratory tract and collected during air sampling with a particle size-selective device that, (a) meets the American Conference of Governmental Industrial Hygienists (ACGIH) particle size-selective criteria; and (b) has the cut point of 4 microns at 50 per cent collective efficiency.

Mexico

Occupational exposure limits

Ingredient	Exposure limits
Molybdenum	ACGIH TLV (United States, 1/2009). TWA: 3 mg/m ³ , (as Mo) 8 hour(s). Form: Insoluble
Tungsten	NOM-010-STPS (Mexico, 9/2000). LMPE-PPT: 5 mg/m ³ , (as W) 8 hour(s). LMPE-CT: 10 mg/m ³ , (as W) 15 minute(s).

Consult local authorities for acceptable exposure limits.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

8. Exposure controls/personal protection

- Engineering measures** : No special ventilation requirements. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- Hygiene measures** : Wash thoroughly after handling.
- Personal protection**
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Use strong, cut-resistant gloves suitable for handling metals.
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

9. Physical and chemical properties

- Physical state** : Solid.
- Appearance** : Bar. / Disc. / Rod. / Scrap. / Sheet.
- Color** : Gray.
- Odor** : Odorless.
- pH** : Not available.
- Boiling/condensation point** : Not available.
- Melting/freezing point** : 2610°C (4730°F)
- Relative density** : 13.1
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Odor threshold** : Not available.
- Evaporation rate** : Not available.
- Partition coefficient (LogKow)** : Not available.

10. Stability and reactivity

- Chemical stability** : The product is stable.
- Conditions to avoid** : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation.
- Materials to avoid** : Reactive or incompatible with the following materials:
oxidizing materials
Evolves hydrogen on contact with acids. Risk of formation of explosive hydrogen-air mixtures.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

No known significant effects or critical hazards.

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

No known significant effects or critical hazards.

Sensitizer

No known significant effects or critical hazards.

Carcinogenicity

Classification

None identified.

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

12. Ecological information

Ecotoxicity : This material is toxic to aquatic life.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Molybdenum	Acute LC50 800 mg/L Fresh water	Fish - Oncorhynchus mykiss - 20 mm	96 hours

Persistence/degradability

No known significant effects or critical hazards.

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
Mexico Classification	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

PG* : Packing group

15. Regulatory information

United States

- HCS Classification** : Target organ effects
- U.S. Federal Regulations** : **SARA 302/304/311/312 extremely hazardous substances**: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Molybdenum; Tungsten
SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
Molybdenum: Immediate (acute) health hazard, Delayed (chronic) health hazard;
Tungsten: Immediate (acute) health hazard, Delayed (chronic) health hazard
- Clean Water Act (CWA) 307**: No products were found.
- Clean Water Act (CWA) 311**: No products were found.
- Clean Air Act (CAA) 112 accidental release prevention**: No products were found.
- Clean Air Act (CAA) 112 regulated flammable substances**: No products were found.
- Clean Air Act (CAA) 112 regulated toxic substances**: No products were found.
- Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Not listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed

SARA 313

Unless listed below, no non-Persistent, Bioaccumulative, and Toxic chemicals (PBTs) are present above de minimis concentrations. This product may contain minor trace amounts of inherent naturally occurring elements that are considered PBT chemicals; however, specific chemical analysis has not been performed to confirm the presence and/or concentration of these impurities: lead and mercury.

	Product name	CAS number	Concentration
Form R - Reporting requirements	Not applicable.		
Supplier notification	Not applicable.		

State regulations

- Massachusetts** : The following components are listed: MOLYBDENUM; TUNGSTEN

15. Regulatory information

- New York** : None of the components are listed.
- New Jersey** : The following components are listed: MOLYBDENUM; TUNGSTEN
- Pennsylvania** : The following components are listed: MOLYBDENUM; TUNGSTEN
- California Prop. 65**

The California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) requires that the Governor of California publish a list of chemicals known to the State to cause cancer or reproductive harm. No Proposition 65 chemicals are intentionally added to this product; however, components used in the manufacture of this product may contain minor trace amounts of inherent naturally occurring elements (such as, but not limited to, arsenic, beryllium, cadmium, cobalt, lead, mercury, nickel, and radionuclides) that are on the Governor's Proposition 65 list.

- US INVENTORY (TSCA)** : All components are listed or exempted.

Canada

- WHMIS (Canada)** : Not controlled under WHMIS (Canada).

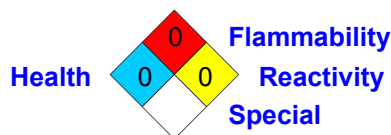
Canadian lists

- Canadian NPRI** : None of the components are listed.
- CEPA Toxic substances** : None of the components are listed.
- Canada inventory** : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico

- Classification** :



International regulations

- International lists** :
- Australia inventory (AICS)**: All components are listed or exempted.
 - China inventory (IECSC)**: All components are listed or exempted.
 - Japan inventory**: All components are listed or exempted.
 - Korea inventory**: All components are listed or exempted.
 - New Zealand Inventory of Chemicals (NZIoC)**: All components are listed or exempted.
 - Philippines inventory (PICCS)**: All components are listed or exempted.

16. Other information

- Label requirements** : CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

- Hazardous Material Information System (U.S.A.)** :

Health	1
Flammability	0
Physical hazards	0

The customer is responsible for determining the PPE code for this material.

- National Fire Protection Association (U.S.A.)** :

16. Other information



Date of issue : 6/3/2011.

Date of previous issue : 8/18/2010.

Version : 2

✔ Indicates information that has changed from previously issued version.

Notice to reader

The information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of H.C. Starck Inc. The data on this sheet relates only to the specific material designated herein. The data is not a quality specification. Neither H.C. Starck Inc. nor its affiliates assumes legal responsibility for use of or reliance on this information. Suitability of use of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, H.C. Starck Inc. cannot guarantee that these are the only hazards that exist.

Material Safety Data Sheet

Date last revised: 13 January 2009

I. General Information

Chemical Name and Synonyms Aliphatic Solvent	Trade Name & Synonyms Mosquito Larvicide GB 1111 Golden Bear 1111 Mosquito Larvicide
Chemical Family Petroleum Hydrocarbon	EPA Registration Number 8329-72
Proper DOT Shipping Name Agricultural Insecticide, N.O.I., Non-hazardous	DOT Hazard Classification Not regulated by the US DOT as a hazardous material
Manufacturer Clarke Mosquito Control Products Inc.	Manufacturer's Phone Number (630) 894-2000
Manufacturer's Address 159 North Garden Avenue Roselle, Illinois 60172	INFOTRAC (Transportation/Spill Emergency) 1-800-535-5053 Poison Control Center (Medical Emergency) 1-800-214-7753

II. Ingredients

Principal Hazardous Components	CAS #	OSHA -PEL-TWA	Percent
White Mineral Oil	8042-47-5	5 mg/m ³ (Oil Mist)	98.7%

III. Physical Data

Boiling Point (°F): Not Available	Density @ 20 °C: 0.853 g/mL	Lbs./gallon: 7.11
Vapor Pressure (mm Hg.): < 0.1 @ 20 °C	Vapor Density (Air = 1): >1	
Solubility in Water: Negligible	pH: 5.14 (1% w/w solution)	
Appearance: colorless, clear oily liquid	Odor: odorless	
Viscosity cSt @ 40 °C: 14.213	Evaporation Rate (water=1): Less than 0.1	

IV. Fire & Explosion Hazard Data

Flash Point (Test Method: 166 °C (331 °F) (Cleveland)
Extinguishing Media: Foam, carbon dioxide, or dry chemical. Water may cause frothing. Water may be ineffective.
Special Properties: Material can burn but will not ignite. This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, heated vapor can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point.
Special Protection: Dense smoke. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Cool fire exposed areas and equipment. Avoid the use of water.

V. Health Hazard Data

Primary Route of Entry: Ingestion and, if a mist is generated, inhalation	Toxicity: Oral LD50 > 5,000 mg/kg Dermal LD50 > 5,000 mg/kg
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VI. EMERGENCY FIRST AID

Skin Contact: Remove contaminated clothing and wash affected areas of skin with soap and water. Launder contaminated clothing before reuse.
Eye: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
Inhalation: Remove affected person to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.
Ingestion: Call a physician or Poison Control Center immediately. Do not induce vomiting. Vomiting may cause aspiration resulting in chemical pneumonia. Do not give anything by mouth to an unconscious person.
Note to Physician: Product contains petroleum distillate. Gastric lavage is indicated if material was taken internally. Vomiting may cause aspiration pneumonia.

VII. Reactivity Data

Stability:	Stable
Incompatibility	Strong oxidizers such a hydrogen peroxide, and chromic acid.
Hazardous Decomposition Products	Carbon monoxide & carbon dioxide, smoke, fumes, and unburned hydrocaroons from burning/combustion.

VIII. Environmental Protection Procedures

Spill Response: Do not touch damaged containers or spilled material unless wearing appropriate PPE. Slipping hazard; do not walk through spilled material. Stop leak if you can do so without risk. For small spills, sbsorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into waste containers for later disposal. Contain large spills to maximize product recovery or disposal. Prevent entry into waterways or sewers. In urban areas, clean up spill as soon as possible. In natural environments, seek cleanup advice from specialists to minimize physical habitat damage. This material will float on water. Absorbent pads and similar materials can be used. Comply with all laws and regulations.

Storage: Store tightly sealed and upright in its original labeled container, in a dry locked place out of reach of children. Avoid exposure to extreme temperatures. Avoid strong oxidizers. Eliminate all sources of ignition, such as flames and sparks.

Waste Disposal: Do not contaminate water, food, or feed by storage or disposal. Pesticide Disposal: Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility. Container Disposal: Triple rinse (or equivalent), following product label instruction. Then offer for recycling or reconditioning, or dispose of in a landfill or by other approved State and local procedures. For guidance, contact your State Water Board or Regional Office of the EPA.

Other Precautions: Do not contaminate water by cleaning of equipment or disposal or wastes.

IX. Special Protection Information

Eye Protection: OSHA-approved safety glasses, goggles or face shield suggested when mixing or loading tank.

Skin Protection: Handlers should wear protective clothing and chemical resistant gloves when mixing or loading tank. Avoid prolonged or repeated contact with skin or breathing of vapors, mist or fumes.

Respiratory Protection: Not likely to be needed

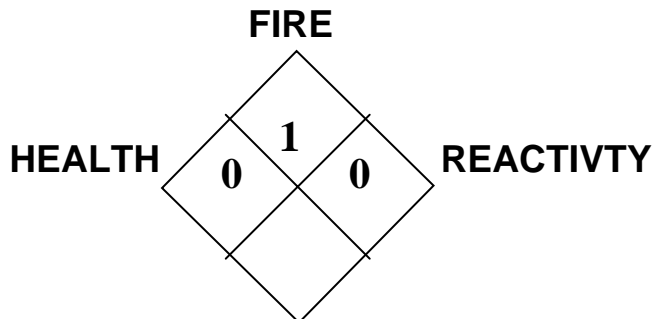
Ventilation: Local if necessary to maintain allowable PEL

Other: IMPORTANT. Read and observe all precautions and instructions on the label.

X. Additional Regulatory Information

Section 313: This chemical does not contain any chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

NFPA Rating Information:



NFPA Code Key

- 4 = Severe
- 3 = Serious
- 2 = Moderate
- 1 = Slight
- 0 = Minimal

The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. **NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.**



MURPHY SOFT WIPES WIPE WOOD CLEANER MULTIUSES

This industrial Material Safety Data Sheet is not intended for consumers and does not address consumer use of the product. For information regarding consumer applications of this product, refer to the product label.

Version 1.0

Revision Date 12/13/2012

Print Date 12/13/2012

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : MURPHY SOFT WIPES WIPE WOOD CLEANER
MULTIUSES
MSDS Number : 200000031744
CAS-No. : Not applicable - product is a mixture
General Use : A formulated multi-purpose cleaner

Company : Colgate-Palmolive Co
300 Park Avenue
New York, NY 10022

Telephone :
Emergency telephone number : For emergencies involving spill, leak, fire, exposure or accident call CHEMTREC (24hr) at (800) 424-9300 or (703) 527-3887.

Medical Emergency (24HR): For MEDICAL EMERGENCIES involving this product call:
(888) 489-3861

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Form : Solid
Appearance : White
Odour : Orange-like odor

Potential Health Effects

Eye contact : Causes eye irritation on direct contact.
Skin contact : May cause skin irritation upon prolonged contact.
Inhalation : No adverse effects due to inhalation are expected.
Ingestion : May be harmful if swallowed in large quantities.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Carcinogenicity:

Listed Carcinogens: The following components, present at a concentration of > or = 0.1%, are listed as carcinogens or potential carcinogens by either the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), OSHA or ACGIH



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No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

SECTION 4. FIRST AID MEASURES

First aid procedures

- Eye contact** : Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
- Skin contact** : Flush skin with large amounts of water. If irritation develops and persists, get medical attention.
- Inhalation** : Remove victim to fresh air. Get medical attention, if symptoms persist.
- Ingestion** : Drink 8 ounces of clear water. Get medical attention.

SECTION 5. FIREFIGHTING MEASURES

Flammable properties

- Flash point** : Estimated > 200 °F (> 93 °C)

Fire fighting

- Suitable extinguishing media** : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Protective equipment and precautions for firefighters

- Special protective equipment for firefighters** : Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Use personal protection recommended in Section 8 of the MSDS.



MURPHY SOFT WIPES WIPE WOOD CLEANER MULTIUSES

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Revision Date 12/13/2012

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**Methods for containment /
Methods for cleaning up** : Cover with inert, absorbent material and remove to disposal container. Spill area may be slippery. Flush with plenty of water.

SECTION 7. HANDLING AND STORAGE

Storage

Requirements for storage areas and containers : Store at controlled room temperature at 20-25°C (68-77°F).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Engineering Controls : In an industrial work environment, no special precautions or control measures are required.

Personal protective equipment

Protective measures : In an industrial work environment, if a splash is likely, chemical goggles may be needed. Prolonged skin contact may require protective gloves. For consumer use, no unusual precautions are necessary.

General Hygiene Considerations : In an industrial work environment, avoid eye and prolonged skin contact.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Solid
Appearance : White

Odour : Orange-like odor

Flash point : Estimated > 200 °F (> 93 °C)

pH : 7.3

Density : > 0.0000 g/cm³



MURPHY SOFT WIPES WIPE WOOD CLEANER MULTIUSES

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Version 1.0

Revision Date 12/13/2012

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SECTION 10. STABILITY AND REACTIVITY

- Materials to avoid** : Remarks: Strong oxidizing agents
- Hazardous decomposition products** : Note: None known.
- Hazardous reactions** : Hazardous polymerisation does not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

This product has not been tested as a whole. However, this formula was reviewed by expert toxicologists in the Product Safety Assurance Department of Colgate-Palmolive and is determined to be safe for its intended use. This review has taken into consideration available safety-related information including information on individual ingredients, similar formulas and potential ingredient interactions. This review is a component of the hazard determination used to prepare the statements in Section 3 of the MSDS.

SECTION 12. ECOLOGICAL INFORMATION

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

- Further information** : Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environment agency for specific rules). Do not dump in sewers, any body of water or on the ground.

SECTION 14. TRANSPORT INFORMATION

- DOT** : Not regulated.
- TDG** : Not regulated.
- IATA** : Not regulated.
- IMDG** : Not regulated.



MURPHY SOFT WIPES WIPE WOOD CLEANER MULTIUSES

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Version 1.0

Revision Date 12/13/2012

Print Date 12/13/2012

SECTION 15. REGULATORY INFORMATION

US Regulations

SARA

Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A) : FORMALDEHYDE
HYDROGEN PEROXIDE

CERCLA Hazardous Substance List (40 CFR 302.4) - Reportable Quantity :

Clean Air Act

Clean Air Act 111 Standards of Performance for New Stationary Sources : FORMALDEHYDE

Clean Water Act

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3) : FORMALDEHYDE

State Regulations

Massachusetts Right-To-Know List : FORMALDEHYDE
HYDROGEN PEROXIDE
TRISODIUM NITRILOTRIACETATE

New Jersey Right-To-Know List : WATER
Sodium tellate

Pennsylvania Right-To-Know List : WATER

Canada



MURPHY SOFT WIPES WIPE WOOD CLEANER MULTIUSES

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Version 1.0

Revision Date 12/13/2012

Print Date 12/13/2012

Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Other Information

In accordance with OSHA 29 CFR 1910.1048 formaldehyde is not listed in Section 3 of this MSDS, however, formaldehyde is regulated by State and Federal regulations at varying concentrations. State and Federal information can be found above in Section 15.

SECTION 16. OTHER INFORMATION

Further information

MSDS Number : 200000031744

Disclaimer: The information on this sheet is limited to the material identified and is believed by the Colgate-Palmolive Company to be correct based on its knowledge and information as of the date noted. Colgate makes no representation, guarantee or warranty, expressed or implied, as to the accuracy, reliability or completeness of the information and assumes no responsibility for injury, damage or loss resulting from the use of the material.

MATERIAL SAFETY DATA SHEET

PRODUCT INFORMATION	
PRODUCT NAME	Microban Original Antibacterial Hand Sanitizer
# CAS	N/A
SUGGESTED USAGE	Wipes out germs and leaves hand clean
MANUFACTURER	Noveko Inc., 3152 Boulevard des Entreprises, Terrebonne (Québec) Canada J6X 4J8
EMERGENCY	
CENTRE ANTI-POISON / POISON CENTER	1-800-463-5060
NOVEKO INC.	1-514-875-0606

SECTION 2					
COMPOSITION AND INFORMATION ON INGREDIENTS					
INGREDIENT	CONC. (%)	# CAS	#EINECS	DL50 / LD50	LC50
SDAG-3 (Anhydrous)	63-77%v/v	64-17-5	N/A	7,06 mg/kg, Rat, oral 20,000mg/kg, Rabbit, oral	31,623 ppm / 4h, Rat, inhal..
OTHER NOTIFICATION	OSHA PEL	ACGIH TLV	LIST		
	1000ppm	1000 ppm	MA 1; NJ 1S; PA 1; CN 2		

SECTION 3		
HAZARDOUS IDENTIFICATION		
WHMIS	CLASSIFICATION	TRANSPORT OF DANGEROUS GOODS
B2 : Flammable Liquid	3	#UN/NA : 1987

SECTION 4	
FIRST AID MEASURES	
EYES	Immediately flush eyes with running water for a minimum of 20 minutes – hold eyelids open during flushing
SENSITIVE SKIN AREA	Wash with mild soap and water.
IF INHALED	Remove to fresh air
IF SWALLOWED	Do not induce vomiting. Give plenty of water or milk to dilute. Call a physician

SECTION 5	
FIRE OR EXPLOSION RISK	
FLAMMABILITY CONDITIONS	
Avoid contact with ignition sources since product is Flammable	
MEANS OF EXTINCTION	
PROCEDURES IN THE CASE	Small fires : Use carbon dioxide or dry chemical Large fires: Apply alcohol-type or all-purpose-type foams.

MATERIAL SAFETY DATA SHEET

OF A FIRE	Use water spray to cool fire-exposed containers and structures. Use water spray to disperse vapours; reignition is possible. Evacuate enclosed and surrounding areas. If fumes and smoke can not be avoided, use adequate suit and breathing apparatus	
FLASH POINT	FLAMMABILITY THRESHOLD	TEMP AUTO-IGNITION
86.36°F/30.2°C (Method : PMCC)	MINIMAL	MAXIMAL
	none	none
HAZADOUS COMBUSTION MATERIALS	EXPLOSIVENESS	
N/A	N/A	

SECTION 6	
ACCIDENTAL RELEASE MEASURES	
PERSON-RELATED SAFETY PRECAUTIONS	Wear adequate personal protective clothing and equipment
MEASURES FOR ENVIRONNEMENTAL PROTECTION	Rinse well with water
MEASURES FOR CLEANING/COLLECTING	Eliminate with water

SECTION 7	
HANDLING AND STORAGE	
VENTILATION	No special measures required
HANDLING PROCEDURES	No special measures required
STORAGE	Dry and fresh location with good ventilation
SHIPPING	No special measures required

SECTION 8	
EXPOSURE CONTROLS AND PERSONAL PROTECTION	
GENERAL PROTECTIVE AND HYGIENIC MEASURES	The usual precautionary measures are to be adhered to when handling chemicals.
RESPIRATORY PROTECTION	Not required
PROTECTION OF HANDS	Not required
EYE PROTECTION	Chemical safety goggles
BODY PROTECTION	Not required

SECTION 9			
PHYSICAL PROPERTIES			
SOLID STATE	pH	SMELL AND APPEARANCE	SOLUBLILITY
Liquid	6.00-7.00	Colourless semi-liquid gel with characteristic alcohol odour	water
BOILING POINT	FREEZING POINT	DENSITY	
N/A	N/A	0.8500-0.8900	

MATERIAL SAFETY DATA SHEET

FLASH POINT	VAPOR PRESSURE
86.36°F/30.2°C (Method : PMCC)	N/A
ODOUR TRESHOLD	EVAPORATION RAIL
N/A	N/A

SECTION 10	
REACTIVITY DATA	
INSTABILITY CONDITIONS	This product is stable in non-emergency conditions
INCOMPATIBLE PRODUCTS	N/A
REACTIVITY CONDITIONS	Stable under normal conditions
HAZARDOUS DECOMPOSITION PRODUCTS	None

SECTION 11		
TOXICOLOGICAL PROPERTIES		
	CONTACT	SHORT TIME EXPOSURE
SKIN	YES	May cause irritation
EYES	YES	May cause irritation
INHALATION	YES	May cause adverse health effects
INGESTION	YES	May cause irritation of the respiratory tract
	ABSORPTION	CHRONIC EFFECTS
SKIN	NO	None
EYES	NO	None
INHALATION	NO	None
INGESTION	NO	None
EXPOSURE LIMIT	N/A	TERATOGENICITY
IRRITANCY	N/A	MUTAGENICITY
EFFECTS ON REPRODUCTION	N/A	SYNERGESTIC MATERIALS
CANCEROGENICITY	N/A	TOXICITY IN NATURE
SENSIBILIZATION	N/A	PHOSPHATES
		N/A
		N/A
		N/A
		N/A

SECTION 12	
ECOLOGICAL INFORMATION	
INFORMATION ABOUT ELIMINATION AND METHOD (PERSISTENCE AND DEGRADABILITY)	N/A
ECOLOGICAL INFORMATION	N/A
GENERAL NOTES	N/A

SECTION 13	
DISPOSAL CONSIDERATIONS	
PRODUCT RECOMMENDATION	Dispose of in an approved landfill in accordance with federal, state/ provincial and local regulations.
UNCLEANED PACKAGING RECOMMENDATION	Since emptied container retains product residue, all

MATERIAL SAFETY DATA SHEET

labeled hazard precautions must be observed.

SECTION 14

TRANSPORT OF DANGEROUS GOODS INFORMATION

<p>LAND TRANSPORT (ADR-RID)</p>	<p>North America Road : Regulatory Considerations : 49 CFR in the USA and TDG in Canada Product in normal retail packaging and master packs: Consumer Commodity-ORM-D Label(s) Required: ORM-D (Consumer Commodity)</p> <p>European Road: Regulatory Considerations: ADR Regulations Product in normal retail packaging and master packs with Inner Packages (bottles) Limited to 5 L and Outer Packages (Masters) Limited to 30 kg G: UN Number: UN1987 PG: III PSN: Alcohols, n.o.s. TN: SDAG-3 Anhydrous Label(s) Required : UN1987 White Diamond Label</p>
<p>MARITIME TRANSPORT (IMDG)</p>	<p>Both Nationally and Internationally Regulatory Considerations : IMO / IMDG Regulations Product in normal retail packaging and master packs with Inner Packages (Bottles) Limited to 5 L and Outer Packages (Masters) Limited to 30 kg G: UN Number: UN1987 PG: III P.S.N : Alcohols, n.o.s. TN: SDAG-3 Anhydrous Label(s) Required : UN 1987 White Diamond Label</p>
<p>AIR TRANSPORT (ICAO-TI & IATA-DGR)</p>	<p>Both Nationally and Internationally Regulatory Considerations: IATA Regulation Product in normal retail packaging with Inner Packages (Bottles) Limited to 0.5L and master packs limited to 30 kg G: UN Number : ID8000 PSN: Consumer Commodity Label(s) Required : Shipper & Consignee Addresses UN Number and PSN Class 9 Miscellaneous</p>

MATERIAL SAFETY DATA SHEET

SECTION 15

REGULATORY INFORMATION

LABELING ACCORDING TO EU GUIDELINES	N/A
CODE LETTER AND HAZARD DESIGNATION OF PRODUCT (WHMIS)	B2 : Flammable liquid
NATIONAL REGULATIONS	N/A
OTHER REGULATORY	N/A

SECTION 16

ADDITIONAL INFORMATION

NOVEKO INC. DIRECTOR, REGULATORY AFFAIRS	ERIC VILLIARD
PREPARATION DATE	11 January 2010

MATERIAL SAFETY DATA SHEET

OFF! INSECT REPELLENT II

Date Issued: 27Jan2005

Supersedes: 03Dec2002

US MANUFACTURER:

S.C. Johnson & Son, Inc.
Phone: (800) 725-6737
Racine, Wisconsin 53403-2236
Emergency Phone: (866) 231-5406
International Emergency Phone:
(952) 852-4647

CANADIAN MANUFACTURER:

S.C. Johnson and Son, Limited
Phone: (800) 725-6737
1 Webster Street
Brantford, Ontario N3T 5R1
Transportation Emergency:
CANUTEC (collect) (613) 996-6666
Poison Control: (866) 231-5406

Table with 4 columns: HAZARD RATING, HMIS, HAZARD, NFPA. Rows include 4-Very High, 3-High, 2-Moderate, 1-Slight, 0-Insignificant.

DISTRIBUTED IN CANADA BY:
S.C. Johnson and Son, Limited
Phone: (800) 725-6737
1 Webster Street
Brantford, Ontario N3T 5R1

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME..... OFF! INSECT REPELLENT II
PRODUCT USE..... Insect repellent

Table with 5 columns: UPC, SCJ CODE, QUANTITY, US SIZE, CANADIAN SIZE. Row: 62300 01910 1255 12 170 GM

SECTION 2 - INGREDIENT INFORMATION

Table with 3 columns: INGREDIENT, WEIGHT%, EXPOSURE LIMIT/TOXICITY. Rows include Butane, Propane, Isobutane, N,N-Diethyl-m-toluamide, Ethanol.

SECTION 3 - HEALTH HAZARDS IDENTIFICATION (Also See Section 11)

ROUTE(S) OF ENTRY..... Skin contact. Eye contact. Inhalation.

EFFECTS OF ACUTE EXPOSURE:

EYE..... May cause: Moderate eye irritation.
SKIN..... May cause skin reactions in rare cases.
INHALATION..... None known.
INGESTION..... None known.

MEDICAL CONDITIONS..... None known.

GENERALLY RECOGNIZED
AS BEING AGGRAVATED
BY EXPOSURE

SECTION 4 - FIRST AID MEASURES

EYE CONTACT..... Rinse with plenty of water. If irritation persists, get medical attention.
SKIN CONTACT..... If reaction occurs, wash skin and seek medical attention.

MATERIAL SAFETY DATA SHEET

Page 2 of 4

MSDS # 111812001

OFF! INSECT REPELLENT II

Date Issued: 27Jan2005

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SECTION 4 - FIRST AID MEASURES (continued)

INHALATION..... No special requirements.
INGESTION..... Contact nearest poison control center.

SECTION 5 - FIRE AND EXPLOSION INFORMATION

FLASH POINT..... < 20°F (< -7°C) (TCC) (propellant)
FLAMMABLE LIMITS..... Not available.
AUTOIGNITION..... Not available.
TEMPERATURE
EXTINGUISHING MEDIA... Foam. CO2. Dry chemical. Water fog.
SPECIAL FIREFIGHTING... Fight fire from maximum distance or protected area. Cool and use
PROCEDURES caution when approaching or handling fire-exposed containers.
Fire fighters should wear self-contained breathing apparatus and protective clothing.
UNUSUAL FIRE AND..... Aerosol product - Containers may rocket or explode in heat of
EXPLOSION HAZARDS fire.

SECTION 6 - PREVENTIVE RELEASE MEASURES

STEPS TO BE TAKEN IN... Eliminate all ignition sources. Dike large spills. Absorb with
CASE MATERIAL IS oil-dri or similar inert material. Sweep or scrape up and
RELEASED OR SPILLED containerize.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONARY..... WARNING: Harmful if swallowed. Avoid contact with eyes and lips.
INFORMATION Do not allow children to rub eyes if hands have been treated .
FLAMMABLE: CONTENTS UNDER PRESSURE. Do not use near open fire, flames or heat. Do not puncture or incinerate. Do not store at temperatures above 120 °F (50 °C).
OTHER HANDLING AND..... Keep out of reach of children.
STORAGE CONDITIONS

SECTION 8 - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION. No special requirements under normal use conditions.
VENTILATION..... Not applicable.
PROTECTIVE GLOVES..... No special requirements under normal use conditions.
EYE PROTECTION..... No special requirements under normal use conditions.
OTHER PROTECTIVE..... No special requirements.
MEASURES

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

COLOR..... Clear
PRODUCT STATE..... Dispensed as a spray mist.
ODOR..... Fragrant
pH..... Not applicable.
ODOR THRESHOLD..... Not available.
SOLUBILITY IN WATER... Appreciable
SPECIFIC GRAVITY..... 0.78
(H2O=1)
VAPOR DENSITY (AIR=1).. Not available.
EVAPORATION RATE (BUTYL Not available.
ACETATE=1)

MATERIAL SAFETY DATA SHEET

OFF! INSECT REPELLENT II

Date Issued: 27Jan2005

Supersedes: 03Dec2002

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES (continued)

VAPOR PRESSURE (mm HG). Not available.
BOILING POINT..... Not available.
FREEZING POINT..... Not available.
COEFFICIENT OF..... Not available.
WATER/OIL
PERCENT VOLATILE BY.... Not available.
VOLUME (%)
VOLATILE ORGANIC..... Not available.
COMPOUND (VOC)
THEORETICAL VOC..... Not available.
(LB/GAL)

SECTION 10 - STABILITY AND REACTIVITY

STABILITY..... Stable
STABILITY - CONDITIONS. Excessive heat.
TO AVOID
INCOMPATIBILITY..... Avoid contact with: Rubber, Plastic.
HAZARDOUS DECOMPOSITION PRODUCTS
When exposed to fire: Produces normal products of combustion.
HAZARDOUS..... Will not occur.
POLYMERIZATION
HAZARDOUS..... Not applicable.
POLYMERIZATION -
CONDITIONS TO AVOID

SECTION 11 - TOXICOLOGY INFORMATION (Also See Section 3)

LD50 (ACUTE ORAL TOX).. Not available.
LD50 (ACUTE DERMAL TOX) Not available.
LC50 (ACUTE INHALATION. Not available.
TOX)
EFFECTS OF CHRONIC..... None known.
EXPOSURE
SENSITIZATION..... None known.
CARCINOGENICITY..... None known.
REPRODUCTIVE TOXICITY.. None known.
TERATOGENICITY..... None known.
MUTAGENICITY..... None known.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA.... Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL..... If possible, recycle empty aerosol can to nearest steel
INFORMATION recycling center. Use up package or give to someone who can.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT INFORMATION..... Not applicable.

MATERIAL SAFETY DATA SHEET

OFF! INSECT REPELLENT II

Date Issued: 27Jan2005

Supersedes: 03Dec2002

----- SECTION 14 - TRANSPORTATION INFORMATION (continued) -----

CANADIAN SHIPPING NAME. OFF! INSECT REPELLENT II
TDG CLASSIFICATION..... Not applicable.
PIN/NIP..... Not applicable.
PACKING GROUP..... Not applicable.
EXEMPTION NAME..... Consumer commodity

----- SECTION 15 - REGULATORY INFORMATION -----

WHMIS CLASSIFICATION... Non-regulated.

All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

All ingredients in this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

This product is not subject to the reporting requirements under California's Proposition 65.

----- SECTION 16 - OTHER INFORMATION -----

ADDITIONAL INFORMATION. NFPA 30B Level 2 Aerosol. PCP NO. 22708
EPA REGISTRATION #..... 4822-380

----- PREPARATION INFORMATION -----

PREPARED BY..... Manufacturer's Technical Support Department. Refer to page 1
(Manufacturer) for contact information.

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PRINT DATE: 13Oct2005

Doc. No: QD015-05

10/03/01 Rev. 1
Office Depot Duster

Approved by: Frank L.

MATERIAL SAFETY DATA SHEET**OFFICE DEPOT CLEANING DUSTER******SECTION I** CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Name: OFFICE DEPOT CLEANING DUSTER
Product Number: 0811563
Chemical Name: 1,1,1,2-Tetrafluoroethane
Manufacturer: QPL, INC.
Address: 800 S. ACADIA ROAD
 THIBODAUX, LA 70301
Telephone Number: (985) 449-0660
Web Site: www.qplchem.com
Emergency numbers: Chemtree (800) 424-9300
 Control Center (Louisiana) (800) 256-9822
Date Prepared: 8/00 Revised 01/03

****SECTION II** HAZARDOUS COMPONENTS**

Hazardous Components:	Case No.	ACGIH	TLV	PEL (OSHA)
1,1,1,2-Tetrafluoroethane	811-97-2	Not Est.		Not Est.

Notes:
 (1) NPCA-HMIS Rating: Health: 1
 Flammability: 0
 Reactivity: 0
 Personal Protection: X (See Section VIII)

This Chemical is not listed as a Carcinogen or potential Carcinogen with: NTP Status, IARC Status or OSHA list.

****SECTION III** PHYSICAL DATA**

Boiling Point: -15.7°F @ 736 mm Hg
Solubility in water: Slight
Vapor pressure: 96 psia @ 70°F
Volatiles (% by weight): 100%
Vapor Density (Air = 1): 3
Density: 1.21 g/cc @ 77°F

Description: A colorless, clear liquefied gas with a slight ethereal odor.

****SECTION IV** FIRE & EXPLOSION HAZARDS**

Flash Point: None **Method Used:** TOC
Flammable Limits: NOT APPLICABLE
Extinguishing Media: As appropriate for combustibles in area
Special fire fighting procedures: Self-contained breathing apparatus. Positive pressure type.
Unusual fire and explosion hazards: None (material itself is not flammable)

****SECTION V** REACTIVITY DATA**

Stability: Yes
Incompatibility (Materials to Avoid): Strong oxidizers and high temperatures above 130°F. Strong acids or bases. Alkaline earth materials.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: High temperatures and sources of ignition such as sparks.
Hazardous Decomposition Products: Source - High Heat, forming hydrofluoric acid and possible carbonyl fluorine.

Doc. No: QD015-05

10/03/01 Rev. 1
Office Depot Duster

Approved by: Frank L.

****SECTION VI** HEALTH HAZARD DATA**Primary Routes of Entry; Effects of Overexposure:Eye: Acute – irritation and redness, tearing and blurred vision.Inhalation: Acute – excessive inhalation may cause temporary alteration of the heart's electrical activity with irregular pulse, palpitations or inadequate circulation. Intentional misuse can be fatal.Skin: Prolong and excessive skin contact may cause frostbite.Ingestion: Not considered a potential route of entry. (Do not administer adrenaline following exposure.)**EMERGENCY / FIRST AID PROCEDURES:**If in Eyes: Flush with water for 15 minutes. Seek medical help if irritation persists.If on Skin: Wash with soap and water. If frostbit treat by warming affected area.If Swallowed: Not considered a potential route of entry.If inhaled: Remove to fresh air. Administer artificial respiration, if needed. If breathing is difficult give oxygen. Call a physician.Note to Physician: Because of possible disturbances of cardiac rhythm, catecholamine drugs, such as epinephrine, should be considered only as a last resort in a life threatening emergencies.****SECTION VII** PRECAUTIONS FOR SAFE HANDLING AND USE**If Material is released or spilled: Ventilate area – especially low areas where heavy vapors may collect. Protect from open flames.Waste Disposal Method: ****DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS****Handling/Storing Precautions: Store in a dry area, away from heat sources or high ambient temperature. OK to store at freezing temperatures.Other Precautions: Keep away from children. For professional or industrial use only.****SECTION VIII** SPECIAL PROTECTION DATA**Respiratory: No respiratory protection is needed under normal outdoor or well-ventilated working conditions.Ventilation: Provide normal ventilation for standard manufacturing procedures.Eyes: Splash proof safety glasses/goggles are recommended. See safety consultant.Gloves: Nitrile rubber or neoprene is recommended for prolonged contact.****SECTION IX** SPECIAL PRECAUTIONS**

Aquatic Toxicity: Not Applicable

Shipping Information:

Proper Shipping Name:	1,1,1,2-tetrafluoroethane
Hazard Class:	Non-flammable gas, 2.2
UN#:	3159
DOT/IATA Label:	Non-flammable Gas

Air Freight Method:

DOMESTIC (DOT) & INTERNATIONAL AIR (IATA)

Passenger - Package max. Wt. 75kg
Cargo - Package max. Wt. 150kg

NA = not applicable	ND = not determined	< = less than
> = Greater than	UNK = unknown	

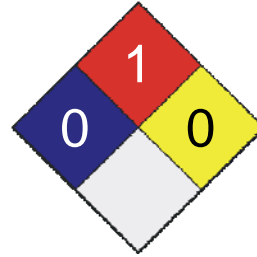
NOTE: The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

1. Product and Company Identification

Product Name OLD ENGLISH® Furniture Wipes
UPC CODES Refer to Section 16
CAS # Mixture
Product use Furniture Polish
Distributed by Reckitt Benckiser
 Morris Corporate Center IV
 399 Interpace Parkway
 P.O. Box 225
 Parsippany, NJ 07054-0225
 In Case of Emergency: 1-800-228-4722
 Transportation Emergencies: 24 Hour Number:
 North America: CHEMTREC: 1-800-424-9300
 Outside North America: 1-703-527-3887

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 0
Flammability	1
Physical Hazard	0
Personal Protection	A



2. Hazards Identification

Emergency overview CAUTION

 MAY CAUSE EYE IRRITATION.
 Avoid contact with eyes.
 DO NOT PUSH FINGER THROUGH OPENING.
 Do not use on floors as it may leave them slippery.

 KEEP OUT OF REACH OF CHILDREN.

Potential short term health effects
Routes of exposure Eye, Skin contact, Inhalation, Ingestion.
Eyes None expected during normal conditions of use.
 May cause eye irritation upon direct contact with the eyes.
Skin None expected during normal conditions of use.
 Not expected to be a skin sensitizer.
Inhalation None expected during normal conditions of use.
Ingestion Health injuries are not known or expected under normal use.
Target organs Respiratory system. Eyes. Skin.
Chronic effects The finished product is not expected to have chronic health effects.
Signs and symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Ethanol	64-17-5	2.5 - 10

4. First Aid Measures

First aid procedures
Eye contact If in eyes, IMMEDIATELY rinse eyes with water. Remove any contact lenses and continue rinsing eyes for at least 15 minutes. If irritation persists, get medical attention.

Skin contact	If on skin, wash with soap and water. If irritation persists or reaction develops, get medical attention.
Inhalation	Move to fresh air.
Ingestion	Rinse mouth with water. Contact a physician or Poison Control Center. Take label or product name number with you when seeking medical attention.
Notes to physician	Contains denatured ethanol; ingestion may result in ethanol poisoning.
General advice	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	The flashpoint of the liquid within this product is > 93.3°C (200°F) (Tagliabue).
Extinguishing media	
Suitable extinguishing media	Dry chemical. Carbon dioxide.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Methods for containment	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Pick up and discard towel. Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

7. Handling and Storage

Handling	CAUTION May cause eye irritation. Avoid contact with eyes. Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product. Use according to package label instructions.
Storage	Store in original container in a cool, secure area inaccessible to children and pets. Keep away from heat, open flames or other sources of ignition. Store containers upright and closed.

8. Exposure Controls / Personal Protection

Exposure limits	
Ingredient(s)	Exposure Limits
Ethanol	ACGIH-TLV TWA: 1000 ppm STEL: 1000 ppm OSHA-PEL TWA: 1000 ppm

Engineering controls	General ventilation normally adequate.
Personal protective equipment	
Eye / face protection	Not normally required under normal use conditions. Emergency responders should wear full eye and face protection.
Hand protection	No special requirements under normal use conditions. Emergency responders should wear impermeable gloves.
Skin and body protection	Usual safety precautions while handling the product will provide adequate protection against this potential effect. Follow label directions carefully.
Respiratory protection	No special requirements under normal use conditions. Emergency responders should wear self-contained breathing apparatus (SCBA) to avoid inhalation of vapours generated by this product during a spill or other clean-up operations.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Washing with soap and water after use is recommended as good hygienic practice to prevent possible eye irritation from hand contact.

9. Physical and Chemical Properties

Appearance	Clear. Liquid saturated on wipe
Color	Turbid liquid
Form	Pre-moistened towelette.
Odor	Lemon.
Odor threshold	Not available
Physical state	Liquid
pH	8 - 9 (Liquid)
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation rate	Not available
Flash point	> 200 °F (> 93.33 °C) (Liquid)
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	> 1 (Liquid)
Octanol/water coefficient	Not available
Solubility (H2O)	Wipe is not soluble
VOC (Weight %)	Not available
Pour point	Not available
Viscosity	Not available

10. Stability and Reactivity

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	DO NOT MIX WITH BLEACH or use in conjunction with other household products.
Incompatible materials	Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Ethanol	31623 ppm rat

Component analysis - Oral LD50

Ingredient(s)	LD50
Ethanol	3450 mg/kg mouse; 7060 mg/kg rat
Effects of acute exposure	
Eye	None expected during normal conditions of use. May cause eye irritation upon direct contact with the eyes.
Skin	None expected during normal conditions of use. Not expected to be a skin sensitizer.
Inhalation	None expected during normal conditions of use.
Ingestion	Health injuries are not known or expected under normal use.
Sensitization	The finished product is not expected to have chronic health effects.
Chronic effects	The finished product is not expected to have chronic health effects.
Carcinogenicity	The finished product is not expected to have chronic health effects.
ACGIH - Threshold Limit Values - Carcinogens	
Ethanol	64-17-5 A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
Mutagenicity	The finished product is not expected to have chronic health effects.
Reproductive effects	The finished product is not expected to have chronic health effects.
Teratogenicity	The finished product is not expected to have chronic health effects.
Synergistic Materials	Not available

12. Ecological Information

Ecotoxicity	Components of this product have been identified as having potential environmental concerns.	
Ecotoxicity - Freshwater Fish Species Data		
Ethanol	64-17-5	96 Hr LC50 Oncorhynchus mykiss: 12.0-16.0 ml/L [static]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400-15100 mg/L [flow-through]
Ecotoxicity - Water Flea Data		
Ethanol	64-17-5	48 Hr LC50 Daphnia magna: 9268 - 14221 mg/L; 24 Hr EC50 Daphnia magna: 10800 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L [Static]
Environmental effects	Not available	
Aquatic toxicity	Not available	
Persistence / degradability	Not available	
Bioaccumulation / accumulation	Not available	
Partition coefficient	Not available	
Mobility in environmental media	Not available	
Chemical fate information	Not available	

13. Disposal Considerations

Waste codes	Not available
Disposal instructions	Dispose of wipe in trash after use. Do not reuse empty container. Rinse container and offer for recycling where facilities exist. Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

UN/ID N.o. Not applicable

U.S. Department of Transportation (DOT): Classification: Not regulated

Proper shipping name Not applicable

U.S. DOT Hazard Class Not applicable

Subsidiary Risk Not applicable

Packing group Not applicable

DOT RQ (lbs) Not applicable

ERG NO Not applicable

Transportation of Dangerous Goods (TDG - Canada): Classification: Not regulated

Proper shipping name Not applicable

Status Not applicable

Packing group Not applicable

IMDG (Marine Transport): Classification: Not regulated

Proper shipping name Not applicable

Class Not applicable

Subsidiary Risk Not applicable

Packing group Not applicable

IMDG Page Not applicable

Marine pollutant Not applicable

EMS Not applicable

MFAG Not applicable

Maximum Quantity Not applicable

IATA/ICAO (Air): Classification: Not regulated

Proper shipping name Not applicable

Class Not applicable

Subsidiary Risk: Not applicable

Packing group Not applicable

Maximum Quantity Not applicable

15. Regulatory Information

US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

Product Registration: Product is compliant with CPSC regulatory guidelines; a specific registration is not required for this product.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - Massachusetts - Right To Know List

Ethanol 64-17-5 Teratogen

U.S. - Minnesota - Hazardous Substance List

Ethanol 64-17-5 Present

U.S. - New Jersey - Right to Know Hazardous Substance List

Ethanol 64-17-5 sn 0844

U.S. - Pennsylvania - RTK (Right to Know) List

Ethanol 64-17-5 Present

U.S. - Rhode Island - Hazardous Substance List

Ethanol 64-17-5 Toxic; Flammable

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer

This product should only be used as directed on the label and for the purpose intended. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Further information

62338-75821 - OLD ENGLISH® Furniture Wipes - 25 ct. - 382040

Issue date

28-Jul-2010

Effective date

31-Jul-2010

Prepared by
Other information

Reckitt Benckiser Regulatory Department 800-333-3899

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

+-----+
 | M A T E R I A L S A F E T Y D A T A S H E E T |
 +-----+

+-----+
 | SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION |
 +-----+

PRODUCT NAME : GLOSS WHITE 12 OZ 0002737
 IDENTIFICATION NUMBER: 1992 830
 DATE PRINTED : 03/29/01

PRODUCT USE/CLASS : Painter's Touch/aerosol

SUPPLIER:
 Rust-Oleum Corporation
 11 Hawthorn Parkway
 Vernon Hills, Illinois
 60061 USA

MANUFACTURER:
 Rust-Oleum Corporation
 11 Hawthorn Parkway
 Vernon Hills, Illinois
 60061 USA

(847) 367-7700 Rust-Oleum Corp.
 8:00 AM-4:30 PM/24-hr Emer.Assist

(847) 367-7700 Rust-Oleum Corp.
 8:00 AM-4:30 PM/24-hr Emer.Assist

PREPARER: MTM, PHONE: 847-816-2445, PREPARE DATE: 03/28/01

+-----+
 | SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS |
 +-----+

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT % LESS THAN
01	LIQUIFIED PETROLEUM GAS	68476-85-7	30.0 %
02	ACETONE	67-64-1	20.0 %
03	XYLENE	1330-20-7	20.0 %
04	Titanium Dioxide	13463-67-7	15.0 %
05	TOLUENE	108-88-3	5.0 %
06	ETHYLBENZENE	100-41-4	5.0 %
07	VM&P NAPHTHA	64742-89-8	5.0 %

ITEM	EXPOSURE LIMITS					
	ACGIH		OSHA		MEXICAN	SKIN
TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING	TLV-TWA		
01	1000 PPM	N.E.	1000 PPM	N.E.	N.E.	NO
02	750 PPM	1000 PPM	750 PPM	N.E.	N.E.	NO
03	100PPM	150PPM	100PPM	N.E.	100 PPM	YES

04	10 mg/m3	N.E.	15 mg/m3	N.E.	N.E.	NO
05	50 PPM	N.E.	200 PPM	300 PPM	N.E.	YES
06	100 PPM	125 PPM	100 PPM	N.E.	N.E.	YES
07	300 PPM	N.E.	300 ppm	N.E.	N.E.	NO

(See Section 16 for abbreviation legend)

(Continued on Page 2)

Product: 1992 830 Preparation Date: 03/28/01 Page 2
+-----+

| SECTION 3 - HAZARDS IDENTIFICATION |
+-----+

*** EMERGENCY OVERVIEW ***: Harmful if inhaled. Harmful if swallowed. Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion. Harmful if inhaled. May effect the brain or nervous system causing dizziness, headache or nausea. Contents Under Pressure.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Prolonged or repeated contact may cause skin irritation.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing vapors or mists. High vapor concentrations are irritating to the eyes, nose, throat and lungs.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed. Aspiration hazard if swallowed; can enter lungs and cause damage.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: May cause central nervous system disorder (e,g.,narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities.

PRIMARY ROUTE(S) OF ENTRY: SKIN ABSORPTION INHALATION EYE CONTACT
+-----+

SECTION 4 - FIRST AID MEASURES

FIRST AID - EYE CONTACT: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention.

FIRST AID - SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

(Continued on Page 3)

Product: 1992 830 Preparation Date: 03/28/01 Page 3

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: -99 F LOWER EXPLOSIVE LIMIT: 0.9 %
UPPER EXPLOSIVE LIMIT: 12.8 %

AUTOIGNITION TEMPERATURE: ND

EXTINGUISHING MEDIA: DRY CHEMICAL FOAM WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS LESS THAN 20 DEG. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat due to buildup of steam. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can. Closed containers may explode when exposed to extreme heat.

SPECIAL FIREFIGHTING PROCEDURES: Evacuate area and fight fire from a safe distance.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Evacuate the area, remove all sources of ignition and ventilate well. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as

sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

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| SECTION 7 - HANDLING AND STORAGE |
+-----+

HANDLING: Wash thoroughly after handling. Wash hands before eating. Use only in a well-ventilated area. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist.

STORAGE: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 degrees F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 degrees F.

(Continued on Page 4)

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Product: 1992 830 Preparation Date: 03/28/01 Page 4
+-----+

| SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION |
+-----+

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking.

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| SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES |
-----+

BOILING RANGE	: -34 - 285 F	VAPOR DENSITY	: Is heavier than air
ODOR	: Solvent	ODOR THRESHOLD	: ND
APPEARANCE	: Liquid	EVAPORATION RATE	: Is faster than Ether
SOLUBILITY IN H2O	: Slight		
FREEZE POINT	: ND	SPECIFIC GRAVITY	: 0.9116
VAPOR PRESSURE	: ND	pH @ 0.0 %	: ND
PHYSICAL STATE	: LIQUID	VISCOSITY	: ND
COEFFICIENT OF WATER/OIL DISTRIBUTION: ND			

(See Section 16 for abbreviation legend)

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| SECTION 10 - STABILITY AND REACTIVITY |
-----+

CONDITIONS TO AVOID: Avoid temperatures above 120 degrees F. Avoid all possible sources of ignition.

(Continued on Page 5)

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Product: 1992 830 Preparation Date: 03/28/01 Page 5
-----+

-----+
| SECTION 10 - STABILITY AND REACTIVITY |
-----+

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION PRODUCTS: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

COMPONENT TOXICOLOGICAL INFORMATION:

CHEMICAL NAME	LD50	LC50
LIQUIFIED PETROLEUM GAS	N.E.	N.E.
ACETONE	RAT 5800MG/KG	RAT 50100MG/M ³ 8H
XYLENE	RAT 4300MG/KG	RAT 5000PPM 4HR
Titanium Dioxide	24000mg/kg Rats	6820mg/m3 Rats
TOLUENE	RAT 5000MG/KG	MOUSE 5320PPM 8HR
ETHYLBENZENE	RAT 3500MG/KG	N.A.
VM&P NAPHTHA	N.D.	N.D.

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Product is a mixture of listed components. According to our raw material suppliers, all components are listed on the TSCA inventory as required or meet the polymer exemption as defined in Section 5.5.2 of the Toxic Substances Control Act.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: AEROSOL

DOT TECHNICAL NAME:

(Continued on Page 6)

Product: 1992 830 Preparation Date: 03/28/01 Page 6

SECTION 14 - TRANSPORTATION INFORMATION

DOT HAZARD CLASS: 2.1

HAZARD SUBCLASS:

DOT UN/NA NUMBER: UN1950

PACKING GROUP:

RESP. GUIDE PAGE: 126

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|                SECTION 15 - REGULATORY INFORMATION                |
+-----+

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U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD	CHRONIC HEALTH HAZARD	FIRE HAZARD
-------------------------	-----------------------	-------------

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

----- CHEMICAL NAME -----	CAS NUMBER	WT/WT % IS LESS THAN
XYLENE	1330-20-7	20.0 %
TOLUENE	108-88-3	5.0 %
ETHYLBENZENE	100-41-4	5.0 %

U.S. STATE REGULATIONS: AS FOLLOWS -

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product:

----- CHEMICAL NAME -----	CAS NUMBER
RESIN SOLUTION	NOT AVAILABLE

PENNSYLVANIA RIGHT-TO-KNOW:

The following non-hazardous ingredients are present in the product at greater than 3%:

----- CHEMICAL NAME -----	CAS NUMBER
RESIN SOLUTION	NOT AVAILABLE

Product: 1992 830 Preparation Date: 03/28/01 Page 7

SECTION 15 - REGULATORY INFORMATION

CALIFORNIA PROPOSITION 65:

WARNING: The chemical(s) noted below and contained in this product, are known to the state of California to cause cancer, birth defects or other reproductive harm:

CHEMICAL NAME	CAS NUMBER
TOLUENE	108-88-3

INTERNATIONAL REGULATIONS: AS FOLLOWS -

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: A B5 D2A D2B

SECTION 16 - OTHER INFORMATION

HMIS RATINGS - HEALTH: FLAMMABILITY: REACTIVITY:

PREVIOUS MSDS REVISION DATE: 06/28/00

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

: No Information.

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.



SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

SECTION 1: Identification

Product identifier	
Product name	pH Indicator Solution (Phenol Red)
Product number	R-0004
Recommended use and restrictions	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
Manufacturer	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

SECTION 2: Hazard(s) identification

Physical hazards	No data available
Health hazards	No data available
Environmental hazards	No data available
Label elements	
Hazard pictograms	No data available
Signal word	No data available
Hazard statements	No data available
Precautionary statements	
Prevention	No data available
Response	No data available
Storage	Keep tightly capped. Store out of direct sunlight between 36°F–85°F.
Disposal	No data available
Hazards not otherwise classified	Avoid contact with skin, eyes, or clothing. For contact with skin or eyes, flush 20 minutes with water. If ingested, contact physician or local poison control center. Treat symptoms as needed.

SECTION 3: Composition/information on ingredients

Mixture			
Chemical name	Common name and synonyms	CAS number	%
Water	Dihydrogen oxide	7732-18-5	90–99
Trade secret	Not available	Not available	0.1–5
Other components below reportable levels			0.1–5

SECTION 4: First-aid measures

If inhaled

Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical attention if irritation develops.

In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice.

If swallowed

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice.

Most important symptoms and effects, both acute and delayed

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5: Firefighting measures**Extinguishing media**

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.
 Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Specific hazards arising from the substance or mixture

Fire hazard Not flammable
 Explosion hazard Not explosive
 Reactivity Hazardous reactions will not occur under normal conditions.
 Hazardous combustion products Carbon oxides and sulfur oxides

Advice for firefighters

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.
 Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.
 Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.
 Other information Refer to section 9 of the SDS for flammability properties.

SECTION 6: Accidental release measures**Personal precautions, protective equipment, and emergency procedures**

Wear appropriate protective equipment and clothing during cleanup. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

Environmental precautions

Avoid discharge into drains, watercourses, or onto the ground.

Methods and material for containment and cleaning up

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recover, flush area with water. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Reference to other sections

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

SECTION 7: Handling and storage**Personal precautions, protective equipment, and emergency procedures**

Do not breathe the mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

Conditions for safe storage, including any incompatibilities

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

SECTION 8: Exposure controls/personal protection**Occupational exposure limits****ACGIH Threshold Limit Values**

Components	Type	Value	Form
Trade secret	TWA	20 mg/m ³	Inhalable fraction and vapor

OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Trade secret	PEL	22 mg/m ³	Not applicable
		5 ppm	Not applicable

Biological limit values No biological exposure limits noted for the ingredient(s)

Exposure guidelines

ACGIH Threshold Limit Values: Skin designation

Trade secret Can be absorbed through skin

California OELs: Skin designation

Trade secret Can be absorbed through skin

Minnesota Hazardous Substance: Skin designation

Trade secret Skin designation applies

OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Trade secret Can be absorbed through skin

Tennessee OELs: Skin designation

Trade secret Can be absorbed through skin

Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

Personal protective equipment

Eye/face protection Wear appropriate chemical safety goggles if contact is likely to occur.

Skin protection Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.

Body protection Wear appropriate protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Clear, red
Odor	Phenolic
Odor threshold	No data available
pH	7.7
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	212°F (100°C)
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	17 mm Hg
Relative vapor density	0.6
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

SECTION 10: Stability and reactivity

Reactivity Hazardous reactions will not occur under normal conditions.

Chemical stability Stable under recommended handling and storage conditions (refer to section 7 of the SDS)

Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use
Conditions to avoid	Contact with incompatible materials. Do not use in areas without adequate ventilation.
Incompatible materials	Oxidizing agents

SECTION 11: Toxicological information

Information on toxicological effects

Inhalation	May cause irritation to the respiratory system
Skin contact	May cause slight or mild transient irritation
Eye contact	May cause slight or mild transient irritation
Ingestion	May cause irritation, nausea, vomiting, and diarrhea

Most important symptoms/effects, acute and delayed

Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness and itching.

Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Acute toxicity

This product is not classified as an acute toxicity hazard. See below for individual ingredient acute toxicity data.

Components	Species	Test Results
Trade secret		
Acute		
<i>Dermal</i>		
LD ₅₀	Rabbit	2050 mg/kg
<i>Oral</i>		
LD ₅₀	Rat	242 mg/kg
Respiratory or skin sensitization	No data available	
Germ cell mutagenicity	No data available	
Carcinogenicity	No data available	
Reproductive toxicity	No data available	
Specific target organ toxicity (single exposure)	No data available	
Specific target organ toxicity (repeated exposure)	No data available	
Aspiration hazard	No data available	

SECTION 12: Ecological information

This product is not classified as environmentally hazardous; however, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

SECTION 13: Disposal considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

No data available

SECTION 15: Regulatory information

No data available

SECTION 16: Other information

NFPA Rating

Health hazard	0
Fire hazard	0
Reactivity	0
Specific	N/A

Disclaimer

The information in the Safety Data Sheet is offered for your consideration and guidance for safe handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

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Issue date:

June 2015

Last revisions

June 2016

MATERIAL SAFETY DATA SHEET

PLEDGE® DUST & ALLERGEN - UNSCENTED DRY CLOTHS

Date Issued: 21Jul2005

Supersedes: 04Dec2002

US MANUFACTURER:

S.C. Johnson & Son, Inc.
Phone: (800) 725-6737
Racine, Wisconsin 53403-2236
Emergency Phone: (866) 231-5406
International Emergency Phone:
(952) 852-4647

CANADIAN MANUFACTURER:

S.C. Johnson and Son, Limited
Phone: (800) 725-6737
1 Webster Street
Brantford, Ontario N3T 5R1
Transportation Emergency:
CANUTEC (collect) (613) 996-6666
Poison Control: (866) 231-5406

Table with 4 columns: HAZARD RATING, HMIS, HAZARD, NFPA. Rows include 4-Very High, 3-High, 2-Moderate, 1-Slight, 0-Insignificant.

DISTRIBUTED IN CANADA BY:
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Phone: (800) 725-6737
1 Webster Street
Brantford, Ontario N3T 5R1

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME..... PLEDGE® DUST & ALLERGEN - UNSCENTED DRY CLOTHS
REASON FOR CHANGE..... No significant changes.
PRODUCT USE..... Household: Cleaning product

SECTION 2 - INGREDIENT INFORMATION

Table with 3 columns: INGREDIENT, WEIGHT%, EXPOSURE LIMIT/TOXICITY. Rows include Film agent and Non-hazardous ingredients.

SECTION 3 - HEALTH HAZARDS IDENTIFICATION (Also See Section 11)

ROUTE(S) OF ENTRY..... Not applicable
EFFECTS OF ACUTE EXPOSURE:
EYE..... None known.
SKIN..... None known.
INHALATION..... None known.
INGESTION..... None known.
MEDICAL CONDITIONS..... None known.
GENERALLY RECOGNIZED
AS BEING AGGRAVATED
BY EXPOSURE

SECTION 4 - FIRST AID MEASURES

EYE CONTACT..... No special requirements.
SKIN CONTACT..... No special requirements.
INHALATION..... No special requirements.
INGESTION..... No special requirements.

SECTION 5 - FIRE AND EXPLOSION INFORMATION

FLASH POINT..... > 200°F (> 93°C)
FLAMMABLE LIMITS..... Not applicable.

MATERIAL SAFETY DATA SHEET

PLEDGE® DUST & ALLERGEN - UNSCENTED DRY CLOTHS

Date Issued: 21Jul2005

Supersedes: 04Dec2002

----- SECTION 5 - FIRE AND EXPLOSION INFORMATION (continued) -----

AUTOIGNITION..... Not applicable.
TEMPERATURE
EXTINGUISHING MEDIA.... Foam. CO2. Dry chemical.
SPECIAL FIREFIGHTING... Normal fire fighting procedure may be used.
PROCEDURES
UNUSUAL FIRE AND..... No special hazards known.
EXPLOSION HAZARDS

----- SECTION 6 - PREVENTIVE RELEASE MEASURES -----

STEPS TO BE TAKEN IN... Sweep or scrape up and containerize.
CASE MATERIAL IS
RELEASED OR SPILLED

----- SECTION 7 - HANDLING AND STORAGE -----

PRECAUTIONARY..... Use as directed. KEEP OUT OF REACH OF CHILDREN.
INFORMATION
OTHER HANDLING AND.... Store in a cool, dry place with adequate ventilation.
STORAGE CONDITIONS

----- SECTION 8 - SPECIAL PROTECTION INFORMATION -----

RESPIRATORY PROTECTION. No special requirements under normal use conditions.
VENTILATION..... General room ventilation adequate.
PROTECTIVE GLOVES..... No special requirements under normal use conditions.
EYE PROTECTION..... No special requirements under normal use conditions.
OTHER PROTECTIVE..... In case of spills, see Section 6.
MEASURES

----- SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES -----

COLOR..... White
PRODUCT STATE..... Wipes
ODOR..... Odorless
pH..... Not applicable.
ODOR THRESHOLD..... Not Applicable
SOLUBILITY IN WATER.... Not applicable
SPECIFIC GRAVITY..... Not available.
(H2O=1)
VAPOR DENSITY (AIR=1).. Not available.
EVAPORATION RATE (BUTYL Not available.
ACETATE=1)
VAPOR PRESSURE (mm HG). Not available.
BOILING POINT..... Not available.
FREEZING POINT..... Not available.
COEFFICIENT OF..... Not available.
WATER/OIL
PERCENT VOLATILE BY.... Not available.
VOLUME (%)
VOLATILE ORGANIC..... Not available.
COMPOUND (VOC)
THEORETICAL VOC..... Not available.
(LB/GAL)

MATERIAL SAFETY DATA SHEET

PLEDGE® DUST & ALLERGEN - UNSCENTED DRY CLOTHS

Date Issued: 21Jul2005

Supersedes: 04Dec2002

----- SECTION 10 - STABILITY AND REACTIVITY -----

STABILITY..... Stable
STABILITY - CONDITIONS. None known.
TO AVOID
INCOMPATIBILITY..... No special requirements.
HAZARDOUS DECOMPOSITION. When exposed to fire: Produces normal products of combustion.
PRODUCTS
HAZARDOUS..... Will not occur.
POLYMERIZATION
HAZARDOUS..... None known.
POLYMERIZATION -
CONDITIONS TO AVOID

----- SECTION 11 - TOXICOLOGY INFORMATION (Also See Section 3) -----

LD50 (ACUTE ORAL TOX).. Not available.
LD50 (ACUTE DERMAL TOX) Not available.
LC50 (ACUTE INHALATION. Not available.
TOX)
EFFECTS OF CHRONIC..... None known.
EXPOSURE
SENSITIZATION..... None known.
CARCINOGENICITY..... None known.
REPRODUCTIVE TOXICITY.. None known.
TERATOGENICITY..... None known.
MUTAGENICITY..... None known.

----- SECTION 12 - ECOLOGICAL INFORMATION -----

ENVIRONMENTAL DATA..... Not available.

----- SECTION 13 - DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL..... Observe all Federal, Provincial, State and Municipal
INFORMATION regulations.

----- SECTION 14 - TRANSPORTATION INFORMATION -----

US DOT INFORMATION..... Not applicable.
CANADIAN SHIPPING NAME. PLEDGE® DUST & ALLERGEN - UNSCENTED DRY CLOTHS
TDG CLASSIFICATION..... Not applicable.
PIN/NIP..... Not applicable.
PACKING GROUP..... Not applicable.
EXEMPTION NAME..... Not applicable.

----- SECTION 15 - REGULATORY INFORMATION -----

WHMIS CLASSIFICATION... Not applicable.

All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

All ingredients in this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

This product is not subject to the reporting requirements under California's Proposition 65.

MATERIAL SAFETY DATA SHEET

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MSDS # 126718005

PLEDGE® DUST & ALLERGEN - UNSCENTED DRY CLOTHS

Date Issued: 21Jul2005

Supersedes: 04Dec2002

----- SECTION 16 - OTHER INFORMATION -----

ADDITIONAL INFORMATION. Use as directed.
EPA REGISTRATION #..... Not applicable.

----- PREPARATION INFORMATION -----

PREPARED BY..... Manufacturer's Technical Support Department. Refer to page 1
(Manufacturer) for contact information.

This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained herein. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.
PRINT DATE: 08Mar2007

MATERIAL SAFETY DATA SHEET

Poli-Kleen Wax Polish

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Poli-Kleen Wax Polish
Product Number: A00136
Product Use: Polishing wax.
Manufacturer/Supplier: Waxie Sanitary Supply
9353 Waxie Way
San Diego, CA 92193-1036
Phone Number: 1-800-995-4466
D.O.T. Emergency Phone: 1-800-255-3924 CHEMTEL 24 HR
Date of Preparation: August 29, 2012 **Revision #:** 2.0

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS: See Section 15

CAUTION

MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. CONTENTS UNDER PRESSURE. CONTAINER MAY EXPLODE IF HEATED. HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

Eye: May cause eye irritation.
Skin: May cause skin irritation.
Ingestion: Not a normal route of exposure. Harmful: may cause lung damage if swallowed.
Inhalation: May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Handling can cause dry skin.

Medical Conditions Aggravated By Exposure: Asthma. Allergies.

Target Organs: Skin, eyes, gastrointestinal tract, respiratory system.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	Wt. %
Distillates (petroleum), hydrotreated light	64742-47-8	5 - 10
Isobutane	75-28-5	1 - 5
Propane	74-98-6	1 - 5
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	0.1 - 1
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	0.1 - 1

MATERIAL SAFETY DATA SHEET

Poli-Kleen Wax Polish

Section 4: FIRST AID MEASURES

- Eye Contact:** In case of contact, immediately flush eyes with plenty of water. If easy to do, remove contact lenses, if worn.
- Skin Contact:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
- General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).
- Note to Physicians:** Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

- Flammability:** Not flammable by OSHA criteria.
- Means of Extinction:**
- Suitable Extinguishing Media:** Powder, foam, carbon dioxide.
 - Unsuitable Extinguishing Media:** Water.
- Products of Combustion:** May include, and are not limited to: oxides of carbon.
- Explosion Data:**
- Sensitivity to Mechanical Impact:** Not available.
 - Sensitivity to Static Discharge:** Not available.
- Protection of Firefighters:** Containers may explode when heated. Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. Ruptured cylinders may rocket.
- Environmental Precautions:** Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.
- Methods for Containment:** Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for Clean-Up:** Vacuum or sweep material and place in a disposal container. Allow gas to dissipate harmlessly into the atmosphere.
- Other Information:** Not available.

MATERIAL SAFETY DATA SHEET

Poli-Kleen Wax Polish

Section 7: HANDLING AND STORAGE

Handling:

Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children. Do not store at temperatures above 49 °C / 120 °F.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Ingredient	Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Distillates (petroleum), hydrotreated light	100 ppm	200 mg/m ³
Isobutane	Not available.	1000 ppm
Propane	1000 ppm	1000 ppm
Distillates (petroleum), hydrotreated light naphthenic	5 mg/m ³ (mist)	5 mg/m ³ (mist)
Distillates (petroleum), hydrotreated heavy naphthenic	5 mg/m ³ (mist)	5 mg/m ³ (mist)

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal Protective Equipment:

HMIS: See Section 15

Eye/Face Protection: Wear eye/face protection.

Hand Protection: Wear suitable gloves.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Opaque.
Colour:	White.
Odour:	Lemon.
Odour Threshold:	Not available.
Physical State:	Gas/Pressurized Liquid.
pH:	9-11
Viscosity:	Not available.
Freezing Point:	Not available.
Boiling Point:	Not available.
Flash Point:	Not available.
Evaporation Rate:	< 1 (Water = 1)
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.

MATERIAL SAFETY DATA SHEET

Poli-Kleen Wax Polish

Vapor Pressure:	Not available.
Vapor Density:	Not available.
Specific Gravity:	0.972 (Concentrate only)
Solubility in Water:	Not available.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	7.2% (US federal/CARB/OTC/LADCO)
VOC content, g/L:	Not available.

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Keep in a cool place.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: Oxidizers.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION

EFFECTS OF ACUTE EXPOSURE

Component Analysis

Ingredient	LD₅₀ (oral)	LC₅₀
Distillates (petroleum), hydrotreated light	> 5000 mg/kg, rat	> 5.2 mg/L 4hr, rat
Isobutane	Not available.	658 mg/L 4hr, rat
Propane	Not available.	658 mg/L 4hr, rat
Distillates (petroleum), hydrotreated light naphthenic	> 5000 mg/kg, rat	2.18 mg/L 4hr, rat
Distillates (petroleum), hydrotreated heavy naphthenic	> 5000 mg/kg, rat	> 5.0 mg/L 4hr, rat

Eye: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin: May cause skin irritation. Handling can cause dry skin.

Ingestion: Not a normal route of exposure. Harmful: may cause lung damage if swallowed.

Inhalation: May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Not hazardous by OSHA criteria.

Carcinogenicity: Not hazardous by OSHA criteria.

MATERIAL SAFETY DATA SHEET

Poli-Kleen Wax Polish

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen *
Distillates (petroleum), hydrotreated light	Not listed.
Isobutane	Not listed.
Propane	Not listed.
Distillates (petroleum), hydrotreated light naphthenic	Not listed.
Distillates (petroleum), hydrotreated heavy naphthenic	Not listed.

* See Section 15 for more information.

Mutagenicity: Not hazardous by OSHA criteria.

Reproductive Effects: Not hazardous by OSHA criteria.

Developmental Effects:

Teratogenicity: Not hazardous by OSHA criteria.

Embryotoxicity: Not hazardous by OSHA criteria.

Respiratory Sensitization: Not hazardous by OSHA criteria.

Skin Sensitization: Not hazardous by OSHA criteria.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: May cause long-term adverse effects in the aquatic environment.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions:

This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Section 14: TRANSPORTATION INFORMATION

DOT Classification

ORM-D, Limited Quantity

Section 15: REGULATORY INFORMATION

Federal Regulations

US: MSDS prepared pursuant to the Hazard Communication Standard (29 CFR 1910.1200).

SARA Title III

Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Distillates (petroleum), hydrotreated light	Not listed.	Not listed.	Not listed.	Not listed.
Isobutane	Not listed.	Not listed.	Not listed.	Not listed.
Propane	Not listed.	Not listed.	Not listed.	Not listed.
Distillates (petroleum), hydrotreated light naphthenic	Not listed.	Not listed.	Not listed.	Not listed.
Distillates (petroleum), hydrotreated heavy naphthenic	Not listed.	Not listed.	Not listed.	Not listed.

MATERIAL SAFETY DATA SHEET

Poli-Kleen Wax Polish

State Regulations

California Proposition 65:

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Global Inventories

Ingredient	USA TSCA
Distillates (petroleum), hydrotreated light	Yes.
Isobutane	Yes.
Propane	Yes.
Distillates (petroleum), hydrotreated light naphthenic	Yes.
Distillates (petroleum), hydrotreated heavy naphthenic	Yes.

HMIS - Hazardous Materials Identification System

Health - 2 Flammability - 2 Physical Hazard - 0 PPE – B

NFPA - National Fire Protection Association:

Health - 2 Fire - 2 Reactivity - 0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

- A1 - Confirmed human carcinogen.
- A2 - Suspected human carcinogen.
- A3 - Animal carcinogen.
- A4 - Not classifiable as a human carcinogen.
- A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

- 1 - The agent (mixture) is carcinogenic to humans.
- 2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
- 2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
- 3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
- 4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

- 1 - Known to be carcinogens.
- 2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION

Disclaimer:

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

Prepared by: Nexreg Compliance Inc.

Prepared for: Waxie Sanitary Supply
1-800-995-4466



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 75004065
Product name Prime Source Glaze Furniture Polish with Lemon Oil
Effective date 12-Dec-2012
Company information Prime Source, LLC
11434 Moog Drive
Saint Louis, MO 63146 United States
Company phone General Assistance 1-630-543-7600
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 05
Supersedes date 17-Oct-2012

2. Hazards Identification

Emergency overview Aerosol. CONTENTS UNDER PRESSURE. Will be easily ignited by heat, spark or flames.

Potential health effects

Eyes Health injuries are not known or expected under normal use.

Skin Health injuries are not known or expected under normal use.

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal.

Ingestion Exposure by ingestion of an aerosol is unlikely.

Target organs Central nervous system.

Chronic effects May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage.

Signs and symptoms Narcosis.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Synthetic Isoparaffinic Hydrocarbon	64742-47-8	15 - 20
n-Butane	106-97-8	10 - 15
Propane	74-98-6	3 - 5
Non-hazardous and other components below reportable levels		60 - 80

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops or persists.

Skin contact Immediately flush skin with plenty of water. Remove and isolate contaminated clothing and shoes. Get medical attention if irritation develops or persists. Wash clothing separately before reuse.

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Call a physician if symptoms develop or persist.

Ingestion Have victim rinse mouth thoroughly with water. Get medical attention immediately. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance.

Notes to physician Symptoms may be delayed.

5. Fire Fighting Measures

Flammable properties Vapor or gas may spread to distant ignition sources and flash back.

Extinguishing media

Suitable extinguishing media Foam. Dry chemical. Carbon dioxide (CO2).

Protection of firefighters

Specific hazards arising from the chemical Fire may produce irritating, corrosive and/or toxic gases.

Protective equipment and precautions for firefighters In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

6. Accidental Release Measures

Methods for containment Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable.

Methods for cleaning up Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Do not smoke while using or until sprayed surface is thoroughly dry. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Avoid prolonged exposure.

Storage Level 1 Aerosol.
Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Keep away from heat, sparks, and flame. Avoid exposure to long periods of sunlight. Store in cool place. Keep the container dry. Keep in an area equipped with sprinklers. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Exposure limits**ACGIH**

Components	CAS #	TWA	STEL	Ceiling
n-Butane	106-97-8	1000 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Propane	74-98-6	1000 ppm	Not established	Not established

Personal protective equipment

Eye / face protection Wear chemical goggles.

Skin protection Protective gloves. Wear chemical protective equipment that is specifically recommended by the manufacturer.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

9. Physical & Chemical Properties
--

Appearance	Milky.
Boiling point	230 °F (110 °C) estimated
Color	White.
Density	0.8649 g/cm3 estimated
Flammability (HOC)	13.6125 kJ/g estimated
Flash back	No
Flash point	-156 °F (-104.4 °C) Propellant
Form	Aerosol.
Freezing point	Not available

Odor	Aromatic.
pH	7 - 8
Physical state	Liquid.
Pressure	54 - 64 psig @ 70F
Solubility	Partially
Specific gravity	0.865 estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition. Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Hazardous decomposition products	May include oxides of nitrogen.

11. Toxicological Information

Acute effects	Acute LD50: 11047 mg/kg estimated, Rat, Dermal Acute LC50: 29 mg/l/4h estimated, Rat, Inhalation
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Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

n-Butane	106-97-8	Inhalation LC50 Rat 658 mg/L 4 h
Propane	74-98-6	Inhalation LC50 Rat 658 mg/L 4 h
Synthetic Isoparaffinic Hydrocarbon	64742-47-8	Inhalation LC50 Rat >5.2 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Sensitization	Not expected to be hazardous by OSHA criteria.
Teratogenicity	Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity	LC50 264 mg/L estimated, Fish, 96.00 Hours. Components of this product have been identified as having potential environmental concerns.
-------------	--

13. Disposal Considerations

Waste codes	D001: Waste Flammable material with a flash point <140 F
Disposal instructions	Consult authorities before disposal. Contents under pressure. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	Aerosols
Hazard class	2.1
UN number	UN1950
Additional information:	
Special provisions	153, N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None



Further information	This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2013, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/13 and may be used now in place of the "Consumer Commodity ORM-D" marking but not concurrently.
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IMDG**Basic shipping requirements:**

Proper shipping name AEROSOLS
Hazard class 2.1
UN number 1950
Additional information:
Packaging exceptions LTD QTY
Item 5F
Labels required NONE
Transport Category 2

**IATA****Basic shipping requirements:**

Proper shipping name Aerosols, flammable
Hazard class 2.1
UN number 1950
Additional information:
Packaging exceptions LTD QTY
Labels required 2.1

**15. Regulatory Information**

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
CERCLA/SARA Hazardous Substances - Not applicable.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance No
Section 311 hazardous chemical Yes
Hazard categories (311/312) Immediate Hazard - Yes
 Delayed Hazard - No
 Fire Hazard - Yes
 Pressure Hazard - Yes
 Reactivity Hazard - No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations**U.S. - Pennsylvania - RTK (Right to Know) List**

n-Butane	106-97-8	Present
Propane	74-98-6	Present
Synthetic Isoparaffinic Hydrocarbon	64742-47-8	Present

16. Other Information**Further information****HMIS Trademark Statement**

Product name: Prime Source Glaze Furniture Polish with Lemon Oil
 Product #: 232-003 Revision date: 12-DEC-2012 Print date: 12-DEC-2012

MSDS US
 4 / 5

HMIS® ratings

Health: 1
Flammability: 2
Physical hazard: 0

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

MSDS sections updated

Product and Company Identification: Product Review
Fire Fighting Measures: Unusual fire & explosion hazards
Transport Information: Product Shipping Name/Packing Group
Regulatory Information: Canada

Prepared by

Regulatory Compliance



MATERIAL SAFETY DATA SHEET

IN CASE OF EMERGENCY CALL CHEMTREC AT 1-800-424-9300

1. PRODUCT IDENTIFICATION AND COMPANY IDENTIFICATION:

Product Name: **PURELL® Advanced with Aloe Instant Hand Sanitizer**

Company Name & Address: GOJO Industries, Inc.
One GOJO Plaza, Suite 500
Akron, OH 44311

Emergency Phone: **1-800-424-9300 CHEMTREC**

Non-Emergency Phone: (330) 255-6000

MSDS Request Phone: (330) 255-6000 x8804

2. INFORMATION ON INGREDIENTS:

HAZARDOUS INGREDIENTS	CAS NUMBER	OSHA PEL	ACGIH TLV	% RANGE
Ethyl Alcohol	64-17-5	1000 ppm	1000 ppm	70% v/v
Isopropanol	67-63-0	400 ppm	200 ppm	< 5

Other ingredient(s) with notification requirements:	CAS NUMBER	List
Ethyl Alcohol	64-17-5	MA 1; NJ 1S; PA 1; CN 2
Isopropanol	67-63-0	MA 1; NJ 1S; PA; CN

3. HAZARDS IDENTIFICATION:

EMERGENCY OVERVIEW

When used according to instructions, the product applicable to this MSDS is safe and presents no immediate or long-term health hazard. However, abnormal entry routes, such as gross ingestion, may require immediate medical attention.

Potential Health Effects:

HMIS: Health 2 Flammability 3 Reactivity 0 Personal Protection None

Eye Contact: May cause eye irritation.
 Skin Contact: No irritation or reaction expected.
 Inhalation: Abnormal entry route
 Ingestion: May cause upset stomach, nausea (Abnormal entry route).
 Carcinogenicity: Not listed as a carcinogen by NTP, IARC, OSHA or ACGIH.

4. FIRST AID MEASURES:

Eye Contact: Do not rub eyes. Flush eyes thoroughly with water for 15 minutes. If condition worsens or irritation persists, contact physician.
 Skin Contact: In the case of allergic reactions see a physician
 Inhalation: Move to fresh air
 Ingestion: Do not induce vomiting. Contact a physician or Poison Control Center.

5. FIRE FIGHTING MEASURES:

NFPA: Health 2 Fire 3 Reactivity 0
 Flashpoint °F/°C (PMCC method): 75.2°F/ 24°C
 Unusual Fire and Explosion Hazards: Product is flammable due to alcohol content.
 Special Fire Fighting Procedures: None known.
 Extinguishing Media: X Water Fog X Alcohol Foam X CO₂ X Dry Chemical Other

6. ACCIDENTAL RELEASE MEASURES:

Avoid contact with ignition sources since product is flammable. Absorb onto inert material and dispose in appropriate manner. Water clean up and rinse. CAUTION – WILL CAUSE SLIPPERY SURFACES.

7. HANDLING AND STORAGE:

Keep away from fire or flame. Store at normal room temperature away from reach of small children. Keep containers sealed. Use older containers first. Avoid freezing conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Eye Protection: None required under normal conditions.
 Skin Protection: None required under normal conditions.
 Respiratory Protection: None required under normal conditions.
 Ventilation: None required under normal conditions.
 Protective Equipment or Clothing: None required under normal conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance and Odor Clear green liquid, fresh fragrance
 pH (undiluted): 6.5 – 8.5
 VOC, %: < 70%

10. STABILITY AND REACTIVITY:

Stable/Non reactive product. Avoid ignition sources.

11. TOXICOLOGICAL INFORMATION:

No acute or chronic toxic effects expected when used according to directions.

12. ECOLOGICAL CONSIDERATIONS:

No ecological or special considerations when used according to directions. Not considered environmentally harmful from normal dilution, expected usage and typical drainage to sewers, septic systems and treatment plants.

13. DISPOSAL CONSIDERATIONS:

Characteristic hazardous waste-flammable liquid. Dispose according to local, state and Federal regulations.

14. TRANSPORT INFORMATION:

Hazardous by transport regulations. When transported by ground modes in the U.S., this product is typically shipped as Consumer Commodity ORM-D. When transported by water, this product is typically shipped as a UN1170 in Limited Quantities. Refer to all current transport regulations for exact requirements.

15. REGULATORY AND OTHER INFORMATION:

TSCA: All ingredients are listed or exempt per reference 15 USC 2602 (2)(B)(vi).
 Complies with current FDA regulations for cosmetic and/or over-the-counter drug products.
 WHMIS: Exempt under the Food and Drug Act

Notice: The information herein is based on data considered to be accurate as of the date of preparation of this material safety data sheet. However, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the foregoing data and safety information. The user assumes all liability for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.

PURELL® Hand Sanitizer

Version 1.2 Revision Date: 03/19/2015 MSDS Number: 46955-00003 Date of last issue: 02/10/2015
 Date of first issue: 01/13/2015

SECTION 1. IDENTIFICATION

Product name : PURELL® Hand Sanitizer

Manufacturer or supplier's details

Company name of supplier : GOJO Industries, Inc.
 Address : One GOJO Plaza, Suite 500
 Akron OH 44311
 Telephone : 1 (330) 255-6000
 Emergency telephone : 1-800-424-9300 CHEMTREC

Recommended use of the chemical and restrictions on use

Recommended use : Hand Sanitizer

Restrictions on use : This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided on the package or instruction sheet.

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids : Category 3
 Eye irritation : Category 2A

GHS Label element

Hazard pictograms :  

Signal Word : Warning

Hazard Statements : H226 Flammable liquid and vapor.
 H319 Causes serious eye irritation.


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Precautionary Statements : **Prevention:**
 P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P233 Keep container tightly closed.
 P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P264 Wash skin thoroughly after handling.
 P280 Wear protective gloves/ eye protection/ face protection.
Response:
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:
 P403 + P235 Store in a well-ventilated place. Keep cool.
Disposal:
 P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

Vapors may form explosive mixture with air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous ingredients

Chemical Name	CAS-No.	Concentration (%)
Ethanol	64-17-5	>= 50 - < 70
Propan-2-ol	67-63-0	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
 When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.
 Get medical attention if symptoms occur.

In case of skin contact : Wash with water and soap as a precaution.
 Get medical attention if symptoms occur.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
 If easy to do, remove contact lens, if worn.

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- Get medical attention.
- If swallowed : If swallowed, DO NOT induce vomiting.
Get medical attention if symptoms occur.
Rinse mouth thoroughly with water.
- Most important symptoms and effects, both acute and delayed : Causes serious eye irritation.
- Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.
- Notes to physician : Treat symptomatically and supportively.
-

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray
Alcohol-resistant foam
Dry chemical
Carbon dioxide (CO₂)
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire fighting : Do not use a solid water stream as it may scatter and spread fire.
Flash back possible over considerable distance.
Vapors may form explosive mixtures with air.
Exposure to combustion products may be a hazard to health.
- Hazardous combustion products : Carbon oxides
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
-

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition.
Use personal protective equipment.
Follow safe handling advice and personal protective equipment recommendations.
- Environmental precautions : Discharge into the environment must be avoided.
-



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Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Non-sparking tools should be used.
Soak up with inert absorbent material.
Suppress (knock down) gases/vapors/mists with a water spray jet.
For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.
Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use with local exhaust ventilation.
Use only in an area equipped with explosion proof exhaust ventilation.

Advice on safe handling : Do not breathe vapors or spray mist.
Do not swallow.
Do not get in eyes.
Avoid prolonged or repeated contact with skin.
Handle in accordance with good industrial hygiene and safety practice.
Non-sparking tools should be used.
Keep container tightly closed.
Keep away from heat and sources of ignition.
Take precautionary measures against static discharges.
Take care to prevent spills, waste and minimize release to the environment.

Conditions for safe storage : Keep in properly labeled containers.
Keep tightly closed.
Keep in a cool, well-ventilated place.
Store in accordance with the particular national regulations.
Keep away from heat and sources of ignition.

Materials to avoid : Do not store with the following product types:
Strong oxidizing agents

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Organic peroxides
 Flammable solids
 Pyrophoric liquids
 Pyrophoric solids
 Self-heating substances and mixtures
 Substances and mixtures which in contact with water emit flammable gases
 Explosives
 Gases

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethanol	64-17-5	TWA	1,000 ppm 1,900 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m ³	OSHA Z-1
		STEL	1,000 ppm	ACGIH
Propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m ³	NIOSH REL
		ST	500 ppm 1,225 mg/m ³	NIOSH REL
		TWA	400 ppm 980 mg/m ³	OSHA Z-1

Biological occupational exposure limits

Ingredients	CAS-No.	Control parameters	Biological specimen	Sam-pling time	Permissible concentration	Basis
Propan-2-ol	67-63-0	Acetone	Urine	End of shift at end of work-week	40 mg/l	ACGIH BEI

Engineering measures : Minimize workplace exposure concentrations.
 Use only in an area equipped with explosion proof exhaust ventilation.
 Use with local exhaust ventilation.

Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and

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use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

- Hand protection
- Material : Impervious gloves
- Material : Flame retardant gloves
- Remarks : Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.
- Eye protection : Wear the following personal protective equipment:
Safety goggles
- Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Wear the following personal protective equipment:
Flame retardant antistatic protective clothing.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
- Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place.
When using do not eat, drink or smoke.
Wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : clear, Colorless to pale yellow
- Odor : citrus
- Odor Threshold : No data available
- pH : 6.0 - 9.2
- Melting point/freezing point : No data available
- Initial boiling point and boiling range : No data available

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Flash point	:	25 °C
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Density	:	0.89 g/cm ³
Solubility(ies)		
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	Not applicable
Autoignition temperature	:	No data available
Decomposition temperature	:	The substance or mixture is not classified self-reactive.
Viscosity		
Viscosity, kinematic	:	1,000 - 35,000 mm ² /s (20 °C)
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Flammable liquid and vapor. Vapors may form explosive mixture with air. Can react with strong oxidizing agents.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Oxidizing agents
Hazardous decomposition products	:	No hazardous decomposition products are known.

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SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Ingredients:**Ethanol:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 124.7 mg/l
Exposure time: 4 h
Test atmosphere: vapor

Propan-2-ol:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 72.6 mg/l
Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Result: No skin irritation

Ingredients:**Ethanol:**

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Propan-2-ol:

Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Ingredients:

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Ethanol:

Species: Rabbit
 Result: Irritation to eyes, reversing within 21 days
 Method: OECD Test Guideline 405

Propan-2-ol:

Species: Rabbit
 Result: Irritation to eyes, reversing within 21 days

Respiratory or skin sensitization

Skin sensitization: Not classified based on available information.
 Respiratory sensitization: Not classified based on available information.

Product:

Assessment: Does not cause skin sensitization.

Ingredients:**Ethanol:**

Test Type: Local lymph node assay (LLNA)
 Routes of exposure: Skin contact
 Species: Mouse
 Result: negative

Propan-2-ol:

Test Type: Buehler Test
 Routes of exposure: Skin contact
 Species: Guinea pig
 Method: OECD Test Guideline 406
 Result: negative

Germ cell mutagenicity

Not classified based on available information.

Ingredients:**Ethanol:**

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
 Result: negative

Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)
 Species: Mouse
 Application Route: Ingestion
 Result: negative

Propan-2-ol:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
 Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo
 cytogenetic assay)
 Species: Mouse
 Application Route: Intraperitoneal injection
 Result: negative

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Carcinogenicity

Not classified based on available information.

Ingredients:**Propan-2-ol:**

Species: Rat

Application Route: inhalation (vapor)

Exposure time: 104 weeks

Method: OECD Test Guideline 451

Result: negative

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Ingredients:**Ethanol:**

Effects on fertility

: Test Type: Two-generation reproduction toxicity study
Species: Mouse
Application Route: Ingestion
Method: OECD Test Guideline 416
Result: negative

Propan-2-ol:

Effects on fertility

: Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Result: negative

Effects on fetal development

: Test Type: Embryo-fetal development
Species: Rat
Application Route: Ingestion
Result: negative

STOT-single exposure

Not classified based on available information.

Ingredients:**Propan-2-ol:**

Assessment: May cause drowsiness or dizziness.

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STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity**Ingredients:****Ethanol:**

Species: Rat
 NOAEL: 2,400 mg/kg
 Application Route: Ingestion
 Exposure time: 2 y

Propan-2-ol:

Species: Rat
 NOAEL: 5000 ppm
 Application Route: inhalation (vapor)
 Exposure time: 104 w
 Method: OECD Test Guideline 413

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Ingredients:****Ethanol:**

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 48 h
Toxicity to algae	:	EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 9.6 mg/l Exposure time: 9 d
Toxicity to bacteria	:	EC50 (Photobacterium phosphoreum): 32.1 mg/l Exposure time: 0.25 h

Propan-2-ol:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 10,000 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 24 h
Toxicity to algae	:	ErC50 (Scenedesmus quadricauda (Green algae)): > 1,800 mg/l


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Exposure time: 8 d

Toxicity to bacteria : EC50 (*Pseudomonas putida*): > 1,050 mg/l
Exposure time: 16 h

Persistence and degradability
Ingredients:
Ethanol:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 84 %
Exposure time: 20 d

Propan-2-ol:

Biodegradability : Result: rapidly degradable

Bioaccumulative potential
Ingredients:
Ethanol:

Partition coefficient: n-octanol/water : log Pow: -0.35

Propan-2-ol:

Partition coefficient: n-octanol/water : log Pow: 0.05

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS
Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION
International Regulation
UNRTDG

UN number : UN 1987
Proper shipping name : ALCOHOLS, N.O.S.


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(Ethanol, Propan-2-ol)

Class : 3
Packing group : III
Labels : 3

IATA-DGR

UN/ID No. : UN 1987
Proper shipping name : Alcohols, n.o.s.
(Ethanol, Propan-2-ol)

Class : 3
Packing group : III
Labels : Flammable Liquids
Packing instruction (cargo aircraft) : 366
Packing instruction (passenger aircraft) : 355

IMDG-Code

UN number : UN 1987
Proper shipping name : ALCOHOLS, N.O.S.
(Ethanol, Propan-2-ol)

Class : 3
Packing group : III
Labels : 3
EmS Code : F-E, S-D
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation
49 CFR

UN/ID/NA number : UN 1987
Proper shipping name : ALCOHOLS, N.O.S.

Class : 3
Packing group : III
Labels : FLAMMABLE LIQUID
ERG Code : 127
Marine pollutant : no

SECTION 15. REGULATORY INFORMATION
EPCRA - Emergency Planning and Community Right-to-Know
CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard


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Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

Propan-2-ol	67-63-0	3.013 %
-------------	---------	---------

US State Regulations
Pennsylvania Right To Know

Ethanol	64-17-5	50 - 70 %
Water	7732-18-5	30 - 50 %
Propan-2-ol	67-63-0	1 - 5 %

New Jersey Right To Know

Ethanol	64-17-5	50 - 70 %
Water	7732-18-5	30 - 50 %
Propan-2-ol	67-63-0	1 - 5 %

California Prop 65 This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

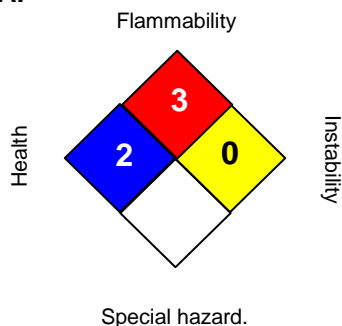
AICS : All ingredients listed or exempt.

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

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SECTION 16. OTHER INFORMATION
Further information
NFPA:

HMIS III:

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

Full text of other abbreviations

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	: ACGIH - Biological Exposure Indices (BEI)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA Z-1	: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	: 8-hour, time-weighted average
ACGIH / STEL	: Short-term exposure limit
NIOSH REL / TWA	: Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	: STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA Z-1 / TWA	: 8-hour time weighted average

Sources of key data used to compile the Material Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date : 03/19/2015

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8

Sanford Corporation
2740 Washington Blvd.
Bellwood, IL 60104

Telephone No: 1-800-323-0749
Date of Last Revision: January 2, 2003
Medical Emergency No: 1-800-228-5635

Section 1 - Product Identification

Product Name: Roll-On Stamp Pad Inker
Colors: Black, Blue, Brown, Green, Red, Violet

Section 2 - Composition

Dyes, water, glycerine (56-81-5), diethylene glycol (111-46-6), polyethylene glycol (25322-68-3)

Section 3 - Physical / Chemical Characteristics

For glycerine:
Boiling Point: Greater than 550°F at 760 mm Hg
Vapor Pressure (mm Hg): Less than 0.1 mm Hg at 72°F
Specific Gravity: 1.2 - 1.3 at 22°C
Solubility in Water: Complete
Appearance / Odor: Water white, clear liquid, bland odor
Evaporation Rate: Not available

Section 4 - Fire and Explosion Hazard Data

Flash Point (Method Used): Greater than 390°F (PMCC)
Flammability Limits (% by volume): Lower: Not available Upper: Not available
Extinguishing Medium: N/A
Special Fire Fighting Procedures: N/A
Unusual Fire and Explosion Hazards: N/A

Section 5 - Reactivity Data

Stability: Stable
Conditions to Avoid: Not available
Chemical Incompatibility: Not available
Hazardous Decomposition: Not available
Hazardous Polymerization: Will not occur

Section 6 - Health Hazard Data

Chemical Listed as Carcinogen or Potential Carcinogen:

IARC Monographs: No
National Toxicology Program: No
OSHA Regulated: No

The product is considered safe when used under normal use conditions.

Section 7 - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: Wipe up with absorbent material.
Waste Disposal Method: Dispose in accordance with Federal, State, and Local Regulations.
Precautions to be Taken in Handling and Storing: Do not squeeze bottle. Keep cap on bottle when not in use.
Other Precautions: None

Section 8 - Personal Protection and Exposure Control Measures

Eye Protection: None under normal use conditions.
Skin Protection: None under normal use conditions.
Respiratory Protection: None under normal use conditions.
Ventilation: None under normal use conditions.
Protective Clothing: None under normal use conditions.

HMIS Code	
Health	1
Flammability	0
Reactivity	0
Personal Protection	N/A

0 = Minimal / 4 = Severe Hazard

Sanford Corporation has been advised by council that the OSHA Hazard Communication Standard does not apply to the Sanford Product described in this MSDS. The reason for the exemption is contained in 29 CFR Part 1910.1200 (b) (6) (ix), as amended July 1, 1994 per the Code of Federal Regulations. The information contained in this MSDS is forwarded to you for your information but is not meant to imply that the product is covered by the Hazard Communication Standard nor is the MSDS meant to comply with all requirements of the Hazard Communication Standard.

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Shachihata STAMP PAD HGN-1,2,3,4 (All colors)
 Shachihata STAMP PAD INK SGN-40,SGN-250 (All colors)
 Shachihata STAMP PAD (ECOS)
 HG-1EC,HG-2EC,HG-3EC,HG-4 (All colors)
 Shachihata STAMP PAD INK SG-40,SG-250 (All colors)
 Shachihata STAMP PAD (2 Colours) HGW-3EC(Red/Black)(Red/Blue)

General Use STAMP PAD INK

MSDS Number ES1104A-0101

MANUFACTURER

Company Name Shachihata Inc.
 Address 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
 Telephone Number ++ 81 52 521 3600
 Fax Number ++ 81 52 521 3899

2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Mixture	Mixture		CAS(TSCA) Number	EINECS Number
	Chemical or Common Name(s)	wt.% Black Others		
Hazardous Ingredients				
Carbon black	5~15	—	1333-86-4	215-609-9

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

May cause allergic skin reaction.

POTENTIAL HEALTH EFFECT

No data available

POTENTIAL ENVIRONMENTAL EFFECTS

No data available

4. FIRST AID MEASURES

INHALATION Move to well ventilated place.
See medical advice immediately.

EYE Immediately flush with plenty of water.
See medical advice immediately.

SKIN Wipe off with dry cloth and wash with mild soap.
See medical advice immediately.

INGESTION See medical advice immediately.

PROTECTION TO FIRST – AIDERS
No data available

NOTE TO PHYSICIAN

Treatment may vary with condition of victim and specifics of incident.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flammable

EXTINGUISHING MEDIA

Dry chemical powder, foam or carbon dioxide.

FIRE FIGHTING INSTRUCTIONS

Wear full fire-fighting turn-out gear and respiratory protection.

6. ACCIDENTAL RELEASE MEASURES

LAND SPILL Wipe off with dry cloth.

WATER SPILL Contain spilled liquid with sand or earth.
Do not use combustible materials, such as sawdust.7. HANDLING AND STORAGEHANDLING : Use only in the well-ventilated areas.
Avoid contact with skin or eyes , or clothing.
Avoid inhalation and ingestion.
Avoid high temp. and fire.
Wash thoroughly after handling.STORAGE : Store in a cool, dry, well-ventilated location.
Keep away from heat, sunlight.
Keep away from children.8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

OSHA PEL (1994)	[Carbon black]	TWA	3.5 mg/m ³
ACGIH TLV (2003)	[Carbon black]	TWA	3.5 mg/m ³
EN LIMIT (2000/39/EN)	Not established		

EXPOSURE CONTROLS

Occupational Exposure Controls

Engineering Controls

Use exhaust ventilation to keep airborne concentration below exposure limits.

Personal Protection

Respiratory Protection

Use with local exhaust ventilation, when in long use.

Hand Protection

Not required, but wear safety gloves, if necessary.

Eye Protection

Not required, but wear safety glasses, if necessary.

Skin Protection

To prevent ANY contact, wear impervious clothing such as gloves, apron, as appropriate.

Environmental Exposure Controls

Not established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Liquid
Odor	minor oil odor
pH	No data available
Boiling Point / Boiling Range	No data available
Flash Point	150 °C (open cup)
Explosive Properties	No data available
Relative Density (g/cm ³)	1.0 g/cm ³
Solubility [Water]	dissoluble

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID No data available

STABILITY No data available

MATERIALS TO AVOID No data available

HAZARDOUS REACTIONS / DECOMPOSITION PRODUCTS

No data available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity (RTECS : 2003.2)

[Carbon black]

Oral	LD ₅₀ (rat)	>15,400 mg/kg
Skin	LD ₅₀ (rabbit)	>3 mg/kg

12. ECOLOGICAL INFORMATION

ECOTOXICITY No data available

BIOACCUMULATIVE POTENTIAL No data available

OTHER ADVERSE EFFECTS No data available

13. DISPOSAL CONSIDERATIONS

Comply with all federal,state,EU,national and local regulations.

Do not dump this product into sewers , on the ground or into any body of water.

14. TRANSPORT INFORMATION

UN CLASS	None
UN Packing Group (PG)	None
UN NUMBER	None
Proper Shipping Name	None

15. REGULATORY INFORMATION

Refer to any other federal , state , EU , national and local regulations.

TSCA STATUS : All components on TSCA INVENTORY.

CERCLA REPORTABLE QUANTITY (40 CFR 117,302) :
Not applicable

SARA TITLE III: Not applicable

EC (2001/59/EC) : Not applicable

Please refer to any other EU, national and local measures.

16. OTHER INFORMATION

This information is furnished without warranty,express or implied,
except that it is accurate to the best knowledge of Shachihata Inc.
It relates only to the specific material designated herein,and does not relate to
use in combination with any other material or process.
Shachihata Inc. assumes no legal responsibility for
use or reliance upon this information.

SAFETY DATA SHEET

CITGO HyDurance™ AW Fluid 32



Section 1. Identification

GHS product identifier : CITGO HyDurance™ AW Fluid 32
Synonyms : Hydraulic Fluid
Code : 633607001

Supplier's details : CITGO Petroleum Corporation
P.O. Box 4689
Houston, TX 77210
sdsvend@citgo.com

Emergency telephone number : Technical Contact: (800) 248-4684
Medical Emergency: (832) 486-4700
CHEMTREC Emergency: (800) 424-9300
(United States Only)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : Warning

Hazard statements : Injection under the skin can cause severe injury.
Most damage occurs in the first few hours.
Initial symptoms may be minimal.

Precautionary statements

General : Avoid contact with eyes, skin and clothing. IF IN EYES: Rinse cautiously with water for several minutes. IF SWALLOWED: Do NOT induce vomiting. After handling, always wash hands thoroughly with soap and water. If you feel unwell, seek medical attention and show the label when possible. Keep out of reach of children.

Prevention : Not applicable.

Response : Not applicable.

Storage : Store in a dry place and/or in closed container. Store in accordance with all local, regional, national and international regulations.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : Injection of petroleum hydrocarbons requires immediate medical attention

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : Hydraulic Fluid

CAS number/other identifiers

CAS number : Not applicable.

Section 3. Composition/information on ingredients

Any concentration shown as a range is to protect confidentiality or is due to process variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Injection of pressurized hydrocarbons can cause severe permanent tissue damage. Initial symptoms may be minor.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : Treat symptomatically and supportively.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Section 5. Fire-fighting measures

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None identified.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required instead.
- Skin protection**
- Hand protection** : Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Avoid skin contact with liquid. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Leather boots are not protective for liquid contact.
- Respiratory protection** : Avoid inhalation of gases, vapors, mists or dusts. Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

- Physical state** : Liquid.
- Color** : Light amber [Light]
- Odor** : Mild petroleum odor [Slight]
- pH** : Not applicable.
- Boiling point/boiling range** : Not available.
- Flash point** : Open cup: 214°C (417.2°F) [Cleveland.]
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : Not available.
- Density lbs/gal** : 7.14 lbs/gal
- Gravity, °API** : 33.6

Section 9. Physical and chemical properties

Viscosity : Dynamic (room temperature): Not applicable.
Kinematic (room temperature): Not applicable.
Kinematic (40°C (104°F)): 0.32 cm²/s (32 cSt)

Viscosity SUS : 155 SUS @100 F

Section 10. Stability and reactivity

Reactivity : Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/Summary : **Distillates (petroleum), hydrotreated heavy paraffinic:** Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

Irritation/Corrosion

Skin : No additional information.

Eyes : No additional information.

Respiratory : No additional information.

Sensitization

Skin : No additional information.

Respiratory : No additional information.

Mutagenicity

Conclusion/Summary : No additional information.

Carcinogenicity

Conclusion/Summary : No additional information.

Reproductive toxicity

Conclusion/Summary : No additional information.

Teratogenicity

Conclusion/Summary : No additional information.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Section 11. Toxicological information

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : Injection of pressurized hydrocarbons can cause severe permanent tissue damage. Initial symptoms may be minor.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Potential chronic health effects

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b):** All components are listed or exempted.
Clean Water Act (CWA) 307: Zinc and zinc compounds; Toluene; Phenol
Clean Water Act (CWA) 311: Toluene; Phenol
 This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Phenol	<0.001	Yes.	500 / 10000	-	1000	-

Section 15. Regulatory information

SARA 304 RQ : 106837606.8 lbs / 48504273.5 kg [14899387.7 gal / 56400318 L]

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	%	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Toluene	<0.01	No.	Yes.	No.	7000 µg/day (ingestion)
ethyl acrylate	<0.001	Yes.	No.	No.	No.

International regulations

International lists

: **Australia inventory (AICS):** All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: All components are listed or exempted.
Korea inventory: All components are listed or exempted.
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
Taiwan inventory (CSNN): Not determined.

Canada inventory : All components are listed or exempted.

EU Inventory : All components are listed or exempted.

WHMIS (Canada) : Not controlled under WHMIS (Canada).

Section 16. Other information

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of issue/Date of revision : 5/26/2015.

Section 16. Other information

Key to abbreviations

- : ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

Notice to reader

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CITGO is a registered trademark of CITGO Petroleum Corporation

MATERIAL SAFETY DATA SHEET

Glass & Mirror Cleaner (STP18485)(BPR123A19-A)

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Glass & Mirror Cleaner (STP18485)(BPR123A19-A)
Product Number: A00123
Product Use: Cleaner.
Manufacturer/Supplier: Staples Contract & Commercial, Inc.
500 Staples Drive,
Framingham, MA 01702 USA
Phone Number: 1-888-322-0912
D.O.T. Emergency Phone: 1-888-322-0912 (24-hours, 7 days a week)
Date of Preparation: August 26, 2012 **Revision #:** 3.1

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS: See Section 15

DANGER

MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. MAY CAUSE RESPIRATORY SENSITIZATION. CONTENTS UNDER PRESSURE. CONTAINER MAY EXPLODE IF HEATED. HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: Not a normal route of exposure. Harmful: may cause lung damage if swallowed.

Inhalation: May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation. May cause sensitization by inhalation.

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Handling can cause dry skin.

Medical Conditions Aggravated By Exposure: Asthma. Allergies.

Target Organs: Skin, eyes, gastrointestinal tract, respiratory system.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	Wt. %
Propane	74-98-6	1 - 5
Ethanol	64-17-5	1 - 5
Ethylene glycol monobutyl ether	111-76-2	0.5 - 1.5
Isobutane	75-28-5	0.5 - 1.5
Monoethanolamine	141-43-5	0.1 - 1

MATERIAL SAFETY DATA SHEET

Glass & Mirror Cleaner (STP18485)(BPR123A19-A)

Section 4: FIRST AID MEASURES

- Eye Contact:** In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
- Skin Contact:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
- General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).
- Note to Physicians:** Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

- Flammability:** Not flammable by WHMIS/OSHA criteria.
- Means of Extinction:**
- Suitable Extinguishing Media:** Powder, foam, carbon dioxide.
 - Unsuitable Extinguishing Media:** Water.
- Products of Combustion:** May include, and are not limited to: oxides of carbon.
- Explosion Data:**
- Sensitivity to Mechanical Impact:** Not available.
 - Sensitivity to Static Discharge:** Not available.
- Protection of Firefighters:** Containers may explode when heated. Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. Ruptured cylinders may rocket.
- Environmental Precautions:** Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.
- Methods for Containment:** Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for Clean-Up:** Vacuum or sweep material and place in a disposal container. Allow gas to dissipate harmlessly into the atmosphere.
- Other Information:** Not available.

MATERIAL SAFETY DATA SHEET
Glass & Mirror Cleaner (STP18485)(BPR123A19-A)

Section 7: HANDLING AND STORAGE

Handling:

Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children. Do not store at temperatures above 49 °C / 120 °F. Keep away from food, drink and animal foodstuffs.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Ingredient	Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Propane	1000 ppm	1000 ppm
Ethanol	1000 ppm	1000 ppm
Ethylene glycol monobutyl ether	50 ppm	20 ppm
Isobutane	Not available.	1000 ppm
Monoethanolamine	3 ppm	3 ppm

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal Protective Equipment:

HMIS: See Section 15

Eye/Face Protection: Wear eye/face protection.

Hand Protection: Wear suitable gloves.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear.
Colour:	Colorless.
Odour:	Floral/fruity/spice.
Odour Threshold:	Not available.
Physical State:	Gas/Pressurized Liquid.
pH:	10-11
Viscosity:	Not available.
Freezing Point:	Not available.
Boiling Point:	Not available.
Flash Point:	Not available.
Evaporation Rate:	Not available.
Lower Flammability Limit:	Not available.

MATERIAL SAFETY DATA SHEET

Glass & Mirror Cleaner (STP18485)(BPR123A19-A)

Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Specific Gravity:	0.993 (Concentrate only)
Solubility in Water:	Complete.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	7.6% (US federal/CARB/OTC/LADCO)
VOC content, g/L:	Not available.

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Keep in a cool place.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: Oxidizers.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION

EFFECTS OF ACUTE EXPOSURE

Component Analysis

Ingredient	LD₅₀ (oral)	LC₅₀
Propane	Not available.	658 mg/L 4hr, rat
Ethanol	7060 mg/kg, rat	124.7 mg/L 4hr, rat; 450 ppm 4hr, rat;
Ethylene glycol monobutyl ether	470 mg/kg, rat	2.21 mg/L 4hr, rat
Isobutane	Not available.	658 mg/L 4hr, rat
Monoethanolamine	1720 mg/kg, rat	Not available.

Eye: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin: May cause skin irritation. Handling can cause dry skin.

Ingestion: Not a normal route of exposure. Harmful: may cause lung damage if swallowed.

Inhalation: May cause respiratory tract irritation. May cause respiratory sensitization. This product may be aspirated into the lungs and cause chemical pneumonitis.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Not hazardous by WHMIS/OSHA criteria.

Carcinogenicity: Hazardous by WHMIS/OSHA criteria.

MATERIAL SAFETY DATA SHEET
Glass & Mirror Cleaner (STP18485)(BPR123A19-A)

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen *
Propane	Not listed.
Ethanol	G-A3, I-1 (in alcoholic beverages), O
Ethylene glycol monobutyl ether	G-A3, I-3
Isobutane	Not listed.
Monoethanolamine	Not listed.

* See Section 15 for more information.

Mutagenicity: Hazardous by WHMIS/OSHA criteria.

Reproductive Effects: Not hazardous by WHMIS/OSHA criteria.

Developmental Effects:

Teratogenicity: Not hazardous by WHMIS/OSHA criteria.

Embryotoxicity: Not hazardous by WHMIS/OSHA criteria.

Respiratory Sensitization: Hazardous by WHMIS/OSHA criteria.

Skin Sensitization: Not hazardous by WHMIS/OSHA criteria.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: May cause long-term adverse effects in the aquatic environment.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions:

This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Section 14: TRANSPORTATION INFORMATION

DOT Classification

ORM-D, Limited Quantity

TDG Classification

Limited Quantity

Section 15: REGULATORY INFORMATION

Federal Regulations

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

US: MSDS prepared pursuant to the Hazard Communication Standard (29 CFR 1910.1200).

MATERIAL SAFETY DATA SHEET

Glass & Mirror Cleaner (STP18485)(BPR123A19-A)

SARA Title III

Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Propane	Not listed.	Not listed.	Not listed.	Not listed.
Ethanol	Not listed.	Not listed.	Not listed.	Not listed.
Ethylene glycol monobutyl ether	Not listed.	Not listed.	Not listed.	Yes.
Isobutane	Not listed.	Not listed.	Not listed.	Not listed.
Monoethanolamine	Not listed.	Not listed.	Not listed.	Not listed.

State Regulations

California Proposition 65:

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Global Inventories

Ingredient	Canada DSL/NDL	USA TSCA
Propane	DSL	Yes.
Ethanol	DSL	Yes.
Ethylene glycol monobutyl ether	DSL	Yes.
Isobutane	DSL	Yes.
Monoethanolamine	DSL	Yes.

HMIS - Hazardous Materials Identification System

Health - 1* Flammability - 1 Physical Hazard - 0 PPE – B

NFPA - National Fire Protection Association:

Health - 1 Fire - 1 Reactivity - 0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

- Class A - Compressed Gas
- Class D2A - Carcinogenicity
- Class D2A - Mutagenicity
- Class D2A - Respiratory Sensitization
- Class D2B - Skin/Eye Irritant

WHMIS Hazard Symbols:



MATERIAL SAFETY DATA SHEET

Glass & Mirror Cleaner (STP18485)(BPR123A19-A)

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen.

A2 - Suspected human carcinogen.

A3 - Animal carcinogen.

A4 - Not classifiable as a human carcinogen.

A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.

2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.

3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.

4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

1 - Known to be carcinogens.

2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION

Disclaimer:

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

Expiry Date: August 26, 2015

Prepared by: Nexreg Compliance Inc.

Prepared for: Staples Contract & Commercial, Inc. - Phone: 1-888-322-0912



MATERIAL SAFETY DATA SHEET

Based in US Department of Labour Occupational Safety and Health Administration From OMB NO. 1218-0072. Be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. This standard must be consulted for specific requirements

Date: October 2008
Revision Number 1

SECTION I - PRODUCT IDENTIFICATION

IDENTITY Staples Screen Cleaner 8 oz

Product Name: Screen Cleaner Spray , 8oz SKU 775487 (model 16996) [STP08007]

Manufacturer: Systemcare Products Ltd
Units 6/7 Maybrook Industrial Estate
Walsall Wood
West Midlands
WS8 7DG
Tel: 1-800-727-0610
Fax: 1-972-562-4303
Email: datasheets@systemcare.co.uk

SECTION II - HAZARD INGREDIENTS / IDENTITY INFORMATION

No significant hazard

Contains: Non Hazardous Liquid, Contains DMDM Hydantoin and Iodopropynyl Butylcarbamate as a preservation system

SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

State: Liquid
Colour: Colourless
Odour: Odourless
Evaporation rate: Moderate
Solubility in water: Soluble
Boiling point/range°C: 100
pH: 7
Mobility: Soluble in water.
Persistence and degradability: Biodegradable.
Bioaccumulative potential: No bioaccumulation potential.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

Protection of fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.



SECTION V - REACTIVITY DATA

Stability: Stable under normal conditions.
Conditions to avoid: Direct sunlight.
Materials to avoid: Strong oxidising agents. Strong acids. Strong bases.

SECTION VI - HEALTH HAZARD DATA

Emergency Overview: This product has no health hazards reported from normal use

Routes of entry

Skin contact: Usually no symptoms.
Eye contact: There may be irritation and redness.
Ingestion: There may be irritation of the throat.
Inhalation: Usually no symptoms

Emergency First Aid Procedures

Skin contact: Wash immediately with plenty of soap and water.
Eye contact: Bathe the eye with running water for 15 minutes.
Ingestion: Wash out mouth with water.
Inhalation: Consult a doctor.

Carcinogenicity

IARC:
National Toxicology Program:
OSHA:

NFPA Hazard Code

Health hazard rating: 0
Fire hazard rating: 0
Reactivity rating: 0
Special hazard: NONE

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Personal Precautions

Respiratory protection: Respiratory protection not required.
Eye protection: In case of splashing ensure eye bath is to hand.
Skin protection: Not required

Environmental precautions

Do not discharge into drains or rivers. Contain the spillage using bunding.
Turn leaking containers leak side up to prevent any liquid escaping

Prevention of Fire and Explosion

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used.
Use water spray to cool containers.
Protection of firefighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Storage conditions: Store in cool and well ventilated area.



Keep container tightly closed.



Accidental measures and methods for cleaning up:

Absorb into dry earth or sand.
Transfer to a seal-able and label container for disposal by an appropriate method

SECTION VIII - CONTROL MEASURES

Occupational Exposure Controls:
Medical Aggravated by Exposure: None

Ventilation: Normal Room Conditions

Respiratory protection: Respiratory protection not required.
Eye protection: In case of splashing ensure eye bath is to hand.
Skin protection: Not required

Recommended Decontamination Facilities:
Eye wash in case of splashing, washing facilities as appropriate to the condition of usage

Engineering Controls: None required in normal use

SECTION IX - TRANSPORT INFORMATION

DOT Proper Shipping Name: Not regulated
Packing Group: Not regulated
TDG Classification: Not regulated
Hazard Class: Not regulated
Identification Number: Not applicable
IMO: Not regulated
IATA/ICAO Class: Not regulated
UN Hazard Class: Not regulated

SECTION X - OTHER INFORMATION

The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Labelling:
Hazard symbols: No significant hazard.

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material Name: Static Guard Antistatic Spray
Revision Date: May 6 2013
CAS #: Mixture
Product Use: Anti-static Spray
Company Information: B&G Foods, Inc.
Four Gatehall Drive, Suite 110
Parsippany, NJ 07054
973 401 6500
Contact Name: William H. Wright, EVP QA, R&D
(Phone Extension) 6414

2. Hazards Identification

Emergency Overview: CONTENTS UNDER PRESSURE
EXTREMELY FLAMMABLE. Will be easily ignited by heat, spark or flames
Contact with eyes may cause irritation.

Potential short term health effects

Eyes	Contact with eyes may cause irritation. Health injuries are not know or expected under normal use.
Skin	Health injuries are not know or expected under normal use.
Inhalation	Health injuries are not know or expected under normal use. Intentional misuse by concentrating and inhaling the product can be harmful or fatal.
Ingestion	Do not ingest. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Health injuries are not know or expected under normal use.

Target Organs: Central Nervous System. Eyes. Respiratory system. Skin.

Chronic Effects: Conjunctiva. May cause central nervous system disorder (e.g. narcosis involving a loss of coordination, weakness, fatigue, metal confusion and blurred vision) and/or damage.

Main Symptoms: Conjunctivitis. Rash. Irritation. De fattig of the skin. Narcosis. Behavioral changes. Decrease in motor functions.

3. Composition / Information on Ingredients

Components	CAS#	Percent
ALCOHOL DENATURED	64-17-5	< 80
Isobutane	75-28-5	< 10
Hydrofluorocarbon 152A	75-37-6	< 20
Propane	74-98-6	< 2.5

Composition Comments: This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA

4. First Aid Measures

First Aid

Eye Contact	Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops or persists.
Inhalation	Move to fresh air. Call physician if symptoms develop or persist.
Ingestion	Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a picket mask equipped with a one-way valve or to the proper respiratory medical device. If ingestion of a large amount does occur, seek medical attention.

Notes to Physician: Symptoms may be delayed

General Advice: Ensure that medical personnel are aware of the material(s) involved and take precaution to protect themselves. Call physician if symptoms develop or persist. If you feel unwell, seek medical advice (show the label where possible)

5. Fire Fighting Measures

Unusual fire & explosion hazards: Vapor or gas may spread to distant ignition sources and flash back. Run off to sewer may cause fire or explosion hazard. Containers may explode when heated.

Suitable extinguishing media: Small fires: Dry chemical, CO₂, water spray or regular foam.
Large fires: Water spray, fog or regular foam.

Firefighting equipment/instructions: Wear full protective clothing, including helmet, self contained positive pressure or pressure demand

Material Name: Static Guard Antistatic Spray MSDS

MSDS US

Date of Revision: May 6 2013

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breathing apparatus, protective clothing and face mask. Move container from fire area, if you can do it without risk. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. ALWAYS stay away from tanks engulfed in flame. For massive fire, use unmanned hose holders or monitor nozzles, if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire.

Special protective equipment for fire fighters Structural firefighter's protective clothing will only provide limited protection.

Specific methods In the event of fire and/or explosion do not breathe fumes.

Flash Point >-58 °F(>50° C) Propellant

Auto ignition temperature 685.4 °F (362.8 °C) estimated

6. Accidental Release Measures

Containment Procedures Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material where this is possible.

Personal precautions Ventilate closed spaces before entering. Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep out of low areas. Stay up wind.

Methods for cleaning up Large spills: Dike far ahead of liquid spill for later disposal. Absorb with earth, sand or other non combustible material and transfer to containers for later disposal.
Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling Do not handle or store near an open flame, heat or other sources of ignition. Vapors may form explosive mixtures with air. All equipment used when handling the product must be grounded. Avoid contact with skin and eyes. Keep away from sources of ignition – No smoking. May be ignited by open flame. Do not breathe gas/fumes/vapor/spray.

Storage Do not handle or store near an open flame, heat or other sources of ignition. Store in cool place. Keep in a well ventilated place. This material can accumulate static charge, which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Use care in handling/storage. Keep the container dry. Keep this material away from food, drink and animal feed. Keep out of the reach of children.
Level 2 Aerosol

8. Exposure control / Personal Protection

Personal Protective Equipment

Respiratory protection No personal respiratory protective equipment normally required. Applicable for industrial setting only. When workers are facing concentrations over the exposure limit they must use appropriate certified respirators.

Hand protection Not normally needed
Applicable for industrial setting only. Protective gloves.

Eye Protection Avoid contact with eyes
Applicable for industrial settings only. Wear chemical goggles.

Skin and body protection Not normally needed. Applicable for industrial setting only. Use personal protective equipment as required.

Engineering measure to reduce exposure Use process enclosures, local exhaust ventilation or other engineering controls to control airborne levels below recommended exposure limits. Use explosion proof equipment if high dust/air concentrations are possible. Use explosion proof ventilation equipment

Hygiene measures Avoid contact with eyes. When using do not smoke. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Boiling Point >1.04 °F (>-17.2 °C)

Flammability Not available

Form Aerosol

Percent Volatile 90.6097% estimated

Vapor Pressure 47 – 67 psi @70 °F (21.1 °C)

VOC 79.506%

Material Name: Static Guard Antistatic Spray MSDS

MSDS US

10. Chemical Stability & Reactivity Information

Stability Risk of explosion. Risk of ignition.
Incompatibility Acids, Amines, Isocyanates, Strong Oxidizing agents

11. Toxicological information

Toxicology data for the preparation

Local effects Contact may irradiate or burn eyes.

Carcinogenicity

US ACGIH Threshold Limit Values: A4 carcinogen

ALCOHOL DENAT. 64-17-5 Not classifiable as a human carcinogen

Reproductivity Possible reproductive hazard

Chronic toxicity Prolonged exposure may cause chronic effects

Further Information Symptoms may be delayed

12. Ecological Information

Ecotoxicity This material is not expected to be harmful to aquatic life. Components of this product have been identified as having potential environmental concerns.

Invertebrate Toxicity: EC50 value

ALCOHOL DENAT. 64-17-5 Water flea (Daphnia magna)>4.58 mg/l 24 h Static Intoxication

ALCOHOL DENAT. 64-17-5 Water flea (Daphnia magna)>100 mg/l 24 h Static Intoxication

ALCOHOL DENAT. 64-17-5 Water flea (Daphnia magna)>100 mg/l 4 h Static Intoxication

ALCOHOL DENAT. 64-17-5 Water flea (Daphnia magna)>100 mg/l 2 h Static Intoxication

ALCOHOL DENAT. 64-17-5 Water flea (Daphnia magna)>10000 mg/l 24 h Static Intoxication

ALCOHOL DENAT. 64-17-5 Water flea (Daphnia magna)>0000 mg/l 48 h Static Intoxication

ALCOHOL DENAT. 64-17-5 Water flea (Daphnia magna)7.7-11.2 mg/l 48 h Static Intoxication

ALCOHOL DENAT. 64-17-5 Water flea (Daphnia magna)>10100-11200 mg/l 48 h Static Intoxication

ALCOHOL DENAT. 64-17-5 Water flea (Daphnia magna)>12300-13400 mg/l 24 h Static Intoxication

ALCOHOL DENAT. 64-17-5 Water flea (Daphnia magna)>100 mg/l 6 h Static Intoxication

Micro-organisms Toxicity: LC50 value

ALCOHOL DENAT. 64-17-5 Tubellarian, flatworm (Dugesia tigrina)>100 mg/l 96 h Static Mortality

13. Disposal Considerations

Waste Codes D001: Waste Flammable material with a flash pint <140° F (60°C)

Disposal instructions Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. If discarded, this product is considered a RCRA ignitable waste, D001. Incinerate the material under controlled conditions in a approved incinerator.

14. Transport Information

Department of Transportation (DOT) Requirements

<=1L (33.8 Fl. Oz.)

Basic shipping requirements:

Proper Shipping name Consumer Commodity

Hazard Class ORM-D

Subsidiary Hazard Class None

Additional information:

Packaging exceptions 156, 306

Packaging non bulk 156, 306

Packaging bulk None

ERG Number 126

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper Shipping name Aerosols, flammable

Hazard Class 2.1

UN Number UN1950

Additional information:

Special provisions 153, N82

Packaging Exceptions 306

Packaging Non bulk None

Packaging bulk None

ERG Number 126

IATA

Material Name: Static Guard Antistatic Spray MSDS



MSDS US

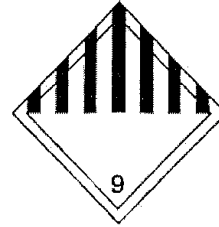
Date of Revision: May 6 2013

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<=1L (33.8 Fl. Oz.)

Basic shipping requirements:

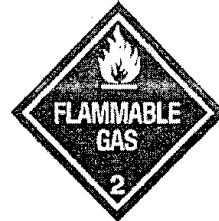
Proper Shipping name Consumer Commodity
 Hazard Class 9
 Subsidiary Hazard Class 3
 UN Number ID8000
 Packaging instructions 910



IATA

Basic shipping requirements:

Proper Shipping name Aerosols, flammable
 Hazard Class 2.1
 Subsidiary Hazard Class 6.1
 UN Number 1950
 Packaging instructions Forbidden



IMDG

Basic shipping requirements:

Proper Shipping name Aerosols, flammable
 Hazard Class 2.1
 Subsidiary Hazard Class 3
 UN Number 1950
 Additional Information
 Item 5F
 Labels Required 2.1
 Transport Category 2



15. Regulatory Information

US Federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910, 1200
 CERCLA/SARA Hazardous Substances – Not applicable

Occupational Safety and Health Administration (OSHA)

29 CFR 1910, 1200 Hazardous Chemical Yes

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance No
 Section 311 hazardous chemical Yes
 Hazard Categories Immediate Hazard – Yes
 Delayed Hazard – Yes
 Fire Hazard – Yes
 Pressure Hazard – No
 Reactivity Hazard - No

HMIS ratings

Health: 1*
 Flammability: 4
 Physical Hazard: 1

NFPA ratings

Health : 1
 Flammability: 4
 Instability: 1

International Regulations This product is classified and labeled in accordance with EC directives or respective national laws.

Inventory Status

Country(s) or region	Inventory Name	On inventory (yes/no)
Australia	Australian inventory of Chemical Substance (AICS)	No
Canada	Domestic Substance List (DSL)	No
Canada	Non Domestic Substance List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No

Material Name: Static Guard Antistatic Spray MSDS

MSDS US

Europe	European Inventory of Notified Chemical Substances (ELINCS)	No
Japan	Japanese Inventory of Existing and New Chemical Substance (ENCs)	No
Korea	Korean Inventory of Chemicals (KICS)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippines Inventory of Chemicals and Chemical Substances(PICCS)	No
United States & Puerto Rico	Toxic Substance Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(S)

State Regulations

US – New Jersey Community RTK (EHS Survey): Reportable threshold

Hydrofluorocarbon 152A	75-37-5	500 lbs
Isobutane	75-28-5	500 lbs
Propane	74-98-6	500 lbs

US – Pennsylvania RTK – Hazardous Substances: posted Substance

Alcohol Denatured	64-17-5	Listed
Isobutane	75-28-5	Listed
Propane	74-98-6	Listed

16. Other information

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designed and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

Issue date

06 May 2013

Sealed Air

Diversey Care



Stride Fragrance Free SC Neutral Cleaner

HMIS		NFPA	Personal protective equipment
Health	2	2	None / Aucune / Ninguno
Flammability	0	0	
Physical Hazard / Instability	0	0	

Version Number: 5

Preparation date: 2014-02-14

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Stride Fragrance Free SC Neutral Cleaner

MSDS #: MS0200009

Product Code: 4240626, 4493981

Recommended use:

- Neutral cleaner
- This product is intended to be diluted prior to use

Manufacturer, importer, supplier:

US Headquarters Diversey, Inc. 8310 16th St. Sturtevant, Wisconsin 53177-1964 Phone: 1-888-352-2249 MSDS Internet Address: www.diversey.com	Canadian Headquarters Diversey, Inc. - Canada 2401 Bristol Circle Oakville, Ontario L6H 6P1 Phone: 1-800-668-3131
--	---

Emergency telephone number: 1-800-851-7145 (U.S.); 1-651-917-6133 (Int'l);

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION. CAUSES EYE IRRITATION. MAY BE MILDLY IRRITATING TO SKIN.

Principal routes of exposure: Eye contact. Skin contact. Inhalation.

Eye contact: Moderately irritating to the eyes.

Skin contact: May be mildly irritating to skin.

Inhalation: None known.

Ingestion: May cause irritation to mouth, throat and stomach.

3. COMPOSITION/INFORMATION ON INGREDIENTS

4. FIRST AID MEASURES

Eye contact: Flush immediately with plenty of water. If irritation persists, get medical attention.

Skin contact: Flush immediately with plenty of water. If irritation develops, get medical attention.

Inhalation: No specific first aid measures are required.

Ingestion: If swallowed, give a cupful of water or milk.

Aggravated Medical Conditions: None known.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: The product is not flammable. Extinguish fire using agent suitable for surrounding fire.
Extinguishing media which must not be used for safety reasons: No information available.
Specific hazards: Not applicable.
Unusual hazards: None known.

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Not relevant for the product itself.
Environmental precautions and clean-up methods: Clean-up methods - large spillage. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Use a water rinse for final clean-up.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.
Storage: Protect from freezing. Keep tightly closed in a dry, cool and well-ventilated place. KEEP OUT OF REACH OF CHILDREN.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:
No special ventilation requirements General room ventilation is adequate

Personal Protective Equipment

Eye protection: No special requirements under normal use conditions.
Hand protection: No special requirements under normal use conditions
Skin and body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.
Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid	Bulk density: No information available
Appearance: Liquid Aqueous solution	Evaporation Rate: No information available
Specific gravity: 1.01	Color: Clear, Orange
Vapor density: No information available	Odor: No Odor/Odorless
Boiling point/range: Not determined	Melting point/range: Not determined
Decomposition temperature: Not determined	Autoignition temperature: No information available
Solubility: Completely Soluble	Density: 8.42 lbs/gal 1.01 Kg/L
Solubility in other solvents: No information available	Flash point: > 200 °F > 93.3 °C
Partition coefficient (n-octanol/water): No information available	Viscosity: No information available
Elemental Phosphorus: 0.00 % by wt.	VOC: 0 % *
pH: 7	Dilution pH: 7 @ 1:256
Explosion limits: - upper: Not determined - lower: Not determined	

* - Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, Consumer Products, Sections 94508

10. STABILITY AND REACTIVITY

Stability: The product is stable
Polymerization: Hazardous polymerization does not occur.
Hazardous decomposition products: None reasonably foreseeable.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Oral LD50 estimated to be greater than 5000 mg/kg. Dermal LD50 estimated to be > 2000 mg/kg.
Component Information: See Section 3.
Chronic toxicity: None known
Specific effects
Carcinogenic effects: • None known
Mutagenic effects: None known

Reproductive toxicity: None known
Target organ effects: None known

12. ECOLOGICAL INFORMATION

Environmental Information: No data available.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Dispose of according to all federal, state and local applicable regulations.

14. TRANSPORT INFORMATION

DOT/TDG/IMDG: Please refer to the Diversey HazMat Library, only available through Internet Explorer, <http://naextranet.diverse.com/dot/>, for up to date shipping information.

DOT (Ground) Bill of Lading Description: CLEANING, WASHING, BUFFING, OR POLISHING COMPOUNDS LIQUID

IMDG (Ocean) Bill of Lading Description: CLEANING, WASHING, BUFFING, OR POLISHING COMPOUNDS LIQUID

15. REGULATORY INFORMATION

International Inventories at CAS# Level

All components of this product are listed on the following inventories: U.S.A. (TSCA), Canada (DSL/NDSL).

U.S. Regulations

California Proposition 65: This product is not subject to the reporting requirements under California's Proposition 65.

RIGHT TO KNOW (RTK)

Ingredient(s)	CAS #	MARTK:	NJRTK:	PARTK:	RIRTK:
Water	7732-18-5	-	-	-	-
Alcohol ethoxylates	68439-46-3	-	-	-	-

CERCLA/ SARA

SARA 311/312 Hazard Categories

Immediate: x
Delayed: -
Fire: -
Reactivity: -
Sudden Release of Pressure: -

Canada

WHMIS hazard class: D2B Toxic materials.



16. OTHER INFORMATION

Reason for revision: Not applicable
Prepared by: NAPRAC
Additional advice: • Does not contain an added fragrance

Notice to Reader: This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained within. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

MATERIAL SAFETY DATA SHEET (OSHA 174 Sept 1985 Format).

Product Identity (Label Name) **Summit Bti Briquets**

SECTION 1

KINZUA ENVIRONMENTAL INC.
1176 EAST 38TH STREET
CLEVELAND, OHIO 44114

1-800-233-5079

EMERGENCY NUMBER: 1-800-424-9300 CHEMTREC

Date Prepared **01-20-2006**

EPA NO. 6218-47 **SUMMIT**

SECTION 2 Hazardous Ingredients/ Identity Information

<u>Hazardous Components.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
<u>OTHER LIMITS</u>		

NO HAZARDOUS OR TOXIC COMPONENTS.

SECTION 3 Physical Characteristics

<u>Boiling Pt.</u> N/A	<u>Sp. Gravity.</u> LESS DENSE THAN WATER.
<u>Vap. Press.</u> N/A	<u>Melt. Pt.</u> NONE.
<u>Vap. Density.</u> N/A	<u>Evap. Rate.</u> N/A
<u>Solubility in water.</u> N/A	
<u>Appearance.</u>	LIGHT BROWN DONUT - SHAPED DISKS.
<u>Odor.</u>	ESSENTIALLY NONE.

SECTION 4 Fire and Explosion Hazard Data

<u>Flash Point.</u> NONE.	<u>Method Used.</u>
---------------------------	---------------------

<u>Flammable Limits.</u> L.E.L. NONE.	<u>U.E.L.</u> NONE.
---------------------------------------	---------------------

Extinguishing Media. WATER, CONVENTIONAL FIRE EXTINGUISHERS.

Special Fire Fighting Procedures
 NONE

SECTION 7 Precautions For Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled.
CLEAN UP WITH SOAP AND WATER.

Waste Disposal Method.
CONVENTIONAL TRASH REMOVAL AND LAND FILL DISPOSAL.

Precautions to Be Taken in Handling and Storage.
STORE IN A COOL DRY PLACE.

Other Precautions.
RESEAL OPENED CONTAINERS AFTER PARTIAL USE.

SECTION 8 Control Measures

Respiratory Protection (Specify Type).
NONE NEEDED.

Ventilation.
Local Exhaust?
NONE NEEDED.

Mechanical?
NONE NEEDED.

Special?
Other?

Protective Clothing.
NONE NEEDED, WEAR NORMAL WORK CLOTHES.

Gloves? NONE NEEDED.
Eye Protection? NONE NEEDED.
Clothes? NONE NEEDED.

Work/Hygienic Practice.
NO SPECIAL PRACTICES NEEDED.

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION



IMPERIAL Toy LLC
16641 Roscoe Place
North Hills, CA 91343

Product Information Telephone 818-536-6500 Transportation Emergency Telephone 800-424-9300
(9:00 am to 6:00 pm EST) CHEMTREC (24 Hours Everyday)

1. PRODUCT INFORMATION

Product Name Super Miracle Bubbles (SMB)
Chemical Name Proprietary Mixture
CAS Number NA
Synonyms NA

2. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	WT. %	CAS NO.	OSHA PEL	ACGIH TLV
Glycol ethers	<0.4	----	No Data	No Data
Proprietary Ingredients	----	----	No Data	No Data

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: Odorless light straw-colored liquid. May cause moderate eye irritation. May cause skin irritation.

POTENTIAL HEALTH EFFECTS

Eyes May cause moderate eye irritation. May cause corneal injury.
Skin Prolonged contact can cause irritation.
Ingestion Single-dose oral toxicity is expected to be low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

Inhalation	At room temperature, exposures to vapors are minimal due to physical properties; higher temperatures may generate vapor levels sufficient to cause irritation.
Chronic Effects/ Carcinogenicity	This material is not considered to be a carcinogen by the National Toxicology Program, the International Agency for Research of Cancer, or the Occupational Safety and Health Administration.
Medical Conditions Aggravated by Exposure	Material and its emissions may aggravate preexisting eye disease.
Primary Routes of Entry	Skin, eyes

4. FIRST AID MEASURES

Eyes	Immediately flush eyes thoroughly and continue to repeatedly flush eyes with constantly running water for 15 minutes, lifting the upper and lower eyelids occasionally. Consult a physician.
Skin	Immediately flush skin thoroughly and continue to repeatedly flush skin with constantly running water for 15 minutes. Remove contaminated clothing and shoes; wash before reuse. Seek medical attention if irritation persists.
Ingestion	If patient is conscious and can swallow, give two glasses of water. Seek medical attention. Induce vomiting only if directed by medical personnel.
Inhalation	Remove to fresh air. Give artificial respiration if not breathing. Administer oxygen if breathing is difficult. Consult physician.

5. FIRE FIGHTING MEASURES

Flash Point:	>200 F
Autoignition Temperature:	No data
Flammable Limits (% by Vol.)	
Lower (LEL):	No data
Upper (UEL):	No data
Extinguishing Media	CO2, dry chemical, BC/ABC extinguishers.
Unusual Fire and Explosion Hazards	None known
Special Instructions	Fire fighters should wear self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE

Action to Take for Spills or Leaks: Contain liquid to prevent contamination of soil surface water or ground water. Cleanup with absorbent material. Collect material in suitable a properly labeled containers.

Disposal Methods: Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate federal, state, and/or local regulatory agencies to

ascertain proper disposal procedures.

7. HANDLING AND STORAGE

Handling: Do not eat, drink, or smoke in working areas.

Storage: Store in a cool, dry, well-ventilated place away from incompatible materials. Keep closed when not in use.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Respiratory For most conditions, no respiratory protection should be needed. However, if handling at elevated temperatures without sufficient ventilation, use a NIOSH-approved air-purifying respirator.

Skin Chemical resistant gloves and work clothes.

Eye Wear safety glasses where no contact with the eyes is anticipated. Chemical splash goggles should be worn whenever there is the possibility of splashing or other eye contact.

Ventilation Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

Other An eyewash and safety shower should be nearby and ready for use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance/Color: Light straw-colored

Odor: Odorless

Freeze Point, °F: Not Known

Boiling Point, °F: Not Known

Solubility: Complete

Evaporation Rate: NA

Specific Gravity (H₂O = 1): 1.006

pH: 7.48 neat

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Elevated temperatures.

Avoid

Incompatible Materials Avoid contact with oxidizing materials.

Decomposition (or Byproducts) None known

11. TOXICOLOGICAL INFORMATION

Oral No data

Inhalation No data

Dermal No data

Carcinogenicity This material is not considered to be a carcinogen by the National Toxicology Program, the International Agency for Research of Cancer, or the Occupational Safety and Health Administration.

12. DISPOSAL CONSIDERATIONS

Any disposal practice must be in compliance with local, state, and federal laws and regulations (contact local or state environmental agency for specific rules).

13. TRANSPORTATION INFORMATION

Proper Shipping Name	Not regulated
DOT Hazard Class	NA
DOT Shipping I.D. Number	NA
Packaging Group	NA
DOT Label	NA

15. REGULATORY INFORMATION

THE INGREDIENTS OF THIS PRODUCT ARE LISTED ON THE TOXIC SUBSTANCES CONTROL ACT (TSCA) INVENTORY OF CHEMICAL SUBSTANCES.

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT OF 1980, SECTION 103)

The following components of this product are listed as hazardous substances in 40 CFR 302.4 (unlisted hazardous substance are not identified) and are present at levels which could require reporting:

None

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTIONS 302 AND 304

The following components of this product are listed as extremely hazardous substances in 40 CFR Part 355 and are present at levels which could require reporting and emergency planning:

None

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTION 313

The following components of this product are listed as toxic chemicals in 40 CFR 372.65 and are present at levels which could require reporting and customer notification under Section 313 and 40 CFR part 372:

Component	CAS#	%
Glycol Ethers	NA	< 16.0

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTIONS 311 AND 312

Delayed Hazard: Yes
Fire Hazard: No
Immediate Health Hazard: Yes
Reactive Hazard: No
Sudden Release of Pressure Hazard: No

16. OTHER INFORMATION

HMIS	HEALTH	FIRE	REACT.	PROTECTION
	0	0	0	X

NOTE: 4=EXTREME 3=HIGH 2=MODERATE 1=SLIGHT 0=INSIGNIFICANT

THE ABOVE INFORMATION IS BASED ON DATA AVAILABLE TO US AND CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE THEREOF, OR THE HAZARDS CONNECTED WITH THE USE OF THE MATERIAL. AS THE INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL AND WITH WHICH WE ARE UNFAMILIAR, WE DO NOT ASSUME ANY RESPONSIBILITY FOR THE RESULTS OF ITS USE. ALL LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR FROM THE USE OF THIS INFORMATION OR THE MATERIAL TO WHICH IT REFERS IS SPECIFICALLY DISCLAIMED. THIS INFORMATION IS FURNISHED UPON THE CONDITION THAT THE PERSONS RECEIVING IT SHALL MAKE THEIR OWN DETERMINATIONS OF THE EFFECTS PROPERTIES AND PROTECTIONS, WHICH PERTAIN TO THEIR PARTICULAR CONDITIONS. THIS IS NEITHER A LICENSE UNDER ANY APPLICABLE PATENTS NOR AN ASSURANCE OF FREEDOM FROM CLAIMS UNDER ANY PENDING OR ISSUED PATENT. ALL WARRANTIES AGAINST PATENT INFRINGEMENTS ARE SPECIFICALLY DISCLAIMED.

MSDS PREPARED BY:

IMPERIAL Toy LLC
16641 Roscoe Place
North Hills, CA 91343

MATERIAL SAFETY DATA SHEET
Surface Disinfectant and Deodorant (STP-18481)(BPR223A16)

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Surface Disinfectant and Deodorant (STP-18481)(BPR223A16)
Product Number: A00223
Product Use: Disinfectant.
Manufacturer/Supplier: Staples Contract & Commercial, Inc.
500 Staples Drive,
Framingham, MA 01702 USA
Phone Number: 1-888-322-0912
D.O.T. Emergency Phone: 1-888-322-0912 (24-hours, 7 days a week)
Date of Preparation: August 31, 2010 **Revision #:** 2.1

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS: See Section 15

DANGER

EXTREMELY FLAMMABLE. HARMFUL BY INHALATION. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. CONTENTS UNDER PRESSURE. CONTAINER MAY EXPLODE IF HEATED.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: Not a normal route of exposure. Harmful: may cause lung damage if swallowed.

Inhalation: May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Medical Conditions Aggravated By Exposure: Asthma. Allergies.

Target Organs: Skin, eyes, gastrointestinal tract, respiratory system.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	Wt. %
Ethanol	64-17-5	30 - 60
Isobutane	75-28-5	10 - 30
Propane	74-98-6	1 - 5
Isopropanol	67-63-0	1 - 5
o-Phenylphenol	90-43-7	0.1 - 1

MATERIAL SAFETY DATA SHEET

Surface Disinfectant and Deodorant (STP-18481)(BPR223A16)

Section 4: FIRST AID MEASURES

- Eye Contact:** In case of contact, immediately flush eyes with plenty of water. If easy to do, remove contact lenses, if worn.
- Skin Contact:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
- General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).
- Note to Physicians:** Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

Flammability: Flammable by WHMIS criteria.

Means of Extinction:

Suitable Extinguishing Media: Powder, water spray, foam, carbon dioxide.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: May include, and are not limited to: oxides of carbon.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

Protection of Firefighters: Containers may explode when heated. Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. Ruptured cylinders may rocket.

Environmental Precautions: Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). This material is a water pollutant. Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.

Methods for Containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Clean-Up: Vacuum or sweep material and place in a disposal container. Allow gas to dissipate harmlessly into the atmosphere.

Other Information: Not available.

MATERIAL SAFETY DATA SHEET

Surface Disinfectant and Deodorant (STP-18481)(BPR223A16)

Section 7: HANDLING AND STORAGE

Handling:

Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. When using, do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children. Do not store at temperatures above 49°C / 120°F. Keep away from food, drink and animal foodstuffs.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Ingredient	Exposure Limits	
	OSHA-PEL	ACGIH-PEL
Ethanol	1000 ppm	1000 ppm
Isobutane	Not available.	Not available.
Propane	1000 ppm	1000 ppm
Isopropanol	400 ppm	200 ppm
o-Phenylphenol	Not available.	Not available.

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal Protective Equipment:

HMIS: See Section 15

Eye/Face Protection: Wear eye/face protection.

Hand Protection: Wear suitable gloves.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear.
Colour:	Colourless.
Odour:	Characteristic.
Odour Threshold:	Not available.
Physical State:	Gas/Pressurized Liquid.
pH:	10-11
Viscosity:	Not available.
Freezing Point:	Not available.
Boiling Point:	Not available.
Flash Point:	Not available.
Evaporation Rate:	Not available.
Lower Flammability Limit:	Not available.

MATERIAL SAFETY DATA SHEET

Surface Disinfectant and Deodorant (STP-18481)(BPR223A16)

Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Specific Gravity:	0.895 (Concentrate only)
Solubility in Water:	Complete.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	66% (US federal/CARB/OTC/LADCO)

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Keep in a cool place.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: Oxidizers. Reducing agents. Ammonium salts.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION

EFFECTS OF ACUTE EXPOSURE

Component Analysis

Ingredient	LD₅₀ (oral)	LC₅₀
Ethanol	7060 mg/kg, rat	20000 ppm 10hr, rat
Isobutane	Not available.	658 mg/L 4hr, rat
Propane	Not available.	658 mg/L 4hr, rat
Isopropanol	4396 mg/kg, rat	72.6 mg/L 4hr, rat
o-Phenylphenol	1049 mg/kg, rat	> 0.949 mg/L 1hr, rat

Eye: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin: May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Ingestion: Not a normal route of exposure. Harmful: may cause lung damage if swallowed.

Inhalation: Harmful by inhalation. May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Not hazardous by OSHA/WHMIS criteria.

Carcinogenicity: Hazardous by OSHA/WHMIS criteria.

MATERIAL SAFETY DATA SHEET

Surface Disinfectant and Deodorant (STP-18481)(BPR223A16)

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen *
Ethanol	G-A3, I-1
Isobutane	Not listed.
Propane	Not listed.
Isopropanol	G-A4, I-3
o-Phenylphenol	I-3, CP65

* See Section 15 for more information.

Mutagenicity: Hazardous by OSHA/WHMIS criteria.

Reproductive Effects: Not hazardous by OSHA/WHMIS criteria.

Developmental Effects:

Teratogenicity: Hazardous by OSHA/WHMIS criteria.

Embryotoxicity: Hazardous by OSHA/WHMIS criteria.

Respiratory Sensitization: Not hazardous by OSHA/WHMIS criteria.

Skin Sensitization: Not hazardous by OSHA/WHMIS criteria.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: May cause long-term adverse effects in the aquatic environment

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions:

This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Section 14: TRANSPORTATION INFORMATION

DOT Classification

ORM-D; Limited Quantity

TDG Classification

Limited Quantity

Section 15: REGULATORY INFORMATION

Federal Regulations

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

US: MSDS prepared pursuant to the Hazard Communication Standard (29 CFR 1910.1200).

MATERIAL SAFETY DATA SHEET

Surface Disinfectant and Deodorant (STP-18481)(BPR223A16)

SARA Title III

Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Ethanol	Not listed.	Not listed.	Not listed.	Not listed.
Isobutane	Not listed.	Not listed.	Not listed.	Not listed.
Propane	Not listed.	Not listed.	Not listed.	Not listed.
Isopropanol	Not listed.	Not listed.	Not listed.	313
o-Phenylphenol	Not listed.	Not listed.	Not listed.	313

State Regulations

California Proposition 65:

This product contains a chemical known to the state of California to cause cancer.

Global Inventories

Ingredient	Canada DSL/NDL	USA TSCA
Ethanol	DSL	Yes.
Isobutane	DSL	Yes.
Propane	DSL	Yes.
Isopropanol	DSL	Yes.
o-Phenylphenol	DSL	Yes.

HMIS - Hazardous Materials Identification System

Health - 2* Flammability - 3 Physical Hazard - 0 PPE – B

NFPA - National Fire Protection Association:

Health - 2 Fire - 3 Reactivity - 0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

- Class A - Compressed Gas
- Class B5 - Flammable Aerosol
- Class D2A - Carcinogenicity
- Class D2A - Mutagenicity
- Class D2A - Teratogenicity and embryotoxicity
- Class D2B - Skin/Eye Irritant

WHMIS Hazard Symbols:



MATERIAL SAFETY DATA SHEET

Surface Disinfectant and Deodorant (STP-18481)(BPR223A16)

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen.

A2 - Suspected human carcinogen.

A3 - Animal carcinogen.

A4 - Not classifiable as a human carcinogen.

A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.

2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.

3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.

4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

1 - Known to be carcinogens.

2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION

Disclaimer:

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

Expiry Date: August 31, 2013

Prepared by: Nexreg Compliance Inc.

Prepared for: Staples Contract & Commercial, Inc. - Phone: 1-888-322-0912

ENVIROCIDE

Surface Disinfectant/Decontaminant Cleaner

1 - IDENTIFICATION

Manufacturer: Metrex Research
Address: 28210 Wick Road
City, State, Zip: Romulus, MI 48174
Telephone: 1-800-841-1428
Emergency: Chemtrec 1- 800-424-9300
Date Prepared: August 2009

2 - COMPOSITION INFORMATION

Hazardous Ingredients

	<u>CAS #</u>	<u>PEL</u>	<u>TLV</u>	<u>%</u>
Isopropanol	67-63-0	400ppm	N/A	10-20
Ethylene Glycol Monobutyl Ether	111-76-2	50ppm	25ppm	1-5

Other Ingredients

Water and other inert ingredients

3 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 191 °F
Specific Gravity (H₂O = 1): 0.970 at 25 °C
Vapor Pressure (mm Hg): Similar to water
Vapor Density (AIR = 1): Similar to water
Freezing/Melting Point: -10°C
Solubility in Water: 100%
Appearance and Odor: Clear to amber liquid with minty odor
pH: 11.00 - 12.49

4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): 83°F (ASTM D-93) Closed Cup
Flammable Limits: LEL: N/A **UEL:** N/A
Extinguishing Media: Carbon dioxide, dry chemical, foam
Special Fire Fighting Procedures: N/A
Unusual Fire and Explosion Hazards: N/A

5 - REACTIVITY DATA

Stability: Stable solution
Conditions to Avoid: Avoid temperatures above 120°F and evaporation of water.
Incompatibility (Material to Avoid): Acids
Hazardous Decomposition Byproducts: Oxides of carbon
Hazardous Polymerization: Will not occur.

6 - HEALTH HAZARD DATA

Routes of Entry:
Skin: Not considered an irritant.
Eyes: Contact with eyes can cause reversible damage.
Inhalation: Low or mild irritation
Ingestion: May be harmful if swallowed.
Carcinogenicity - NTP: No
IARC Monographs: No **OSHA Regulated Carcinogen:** No

7 - EMERGENCY FIRST AID PROCEDURES

Skin: Wash skin with soap and water.
Eyes: Flush with water for 15 minutes. If irritation persists, seek medical attention.
Inhalation: Remove to fresh air. If irritation persists, seek medical attention.
Ingestion: Do not induce vomiting. Give large amounts of water. Seek medical attention.

8 - PRECAUTIONS FOR SAFE HANDLING & USE

Steps to be taken in case material is released or spilled: Ventilate area. Wipe or absorb with inert material and transfer to suitable container for disposal in accordance with federal, state and local regulations.
Waste Disposal Method: Wastes resulting from the use of this product must be disposed of in accordance with federal, state, and local regulations. Triple rinse empty container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration or, if allowed by state and local authorities, by burning. If burned, keep out of smoke.
Precautions to be taken in Handling and Storing: Store product in original sealed container at room temperature.
Other Precautions: Keep out of reach of children. Do not ingest. Avoid eye contact and contamination of food.

9 - CONTROL MEASURES

Respiratory Protection: Use in a well-ventilated area.
VENTILATION:
Local Exhaust: Adequate ventilation to maintain recommended exposure limit.
Mechanical (General): Should be sufficient
Protective Gloves: Not required if used as directed.
Eye Protection: Not required if used as directed.
Work/Hygiene Practices: Handle in accordance with good personal hygiene and safety practices. These practices include avoiding unnecessary exposure.

10 - TRANSPORTATION INFORMATION

DOT:
 This product is not regulated by DOT for ground transportation under the aqueous alcohol exemption per 49 CFR 173.150 (E)(1)(2).

IATA, IMO:

Proper Shipping Name: Alcohol n.o.s. (Isopropanol, aqueous solution)
Hazard Class: 3
Identification Number: 1987
Packaging Group: III
Label: Flammable Liquid

11 - SPECIAL INFORMATION

HMIS (Hazardous Material Identification System) Rating:
 H1 F2 R0
[HMIS Hazard Index: 4 – Severe Hazard; 3 – Serious Hazard; 2 – Moderate Hazard; 1 – Slight Hazard; 0 – Minimum Hazard]

Note: This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is to be used only for this product. The information contained in this MSDS is, to the best of our knowledge, believed to be accurate.



SAFETY DATA SHEET

Issuing date 11-Oct-2011

Revision Date 05-Feb-2015

Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name Swisher Lemon Kleen Disinfectant

Other means of identification

Product Code 41762-1

UN/ID No UN1903

Document 41762-1

Recommended use of the chemical and restrictions on use

Recommended use Disinfectant

Details of the supplier of the safety data sheet

Distributor

Swisher Hygiene Inc.
4725 Piedmont Row Drive
Suite 400
Charlotte, NC 28210

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC: 1-800-424-9300 (NORTH AMERICA)
1-703-527-3887 (INTERNATIONAL)

Company Phone Number 800-444-4138

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

Danger

Hazard Statements

Causes skin irritation
Causes serious eye damage

**Appearance** Thin Liquid**Physical state** Liquid**Odor** Citrus**Precautionary Statements - Prevention**

- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

- Immediately call a POISON CENTER or doctor/physician
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation occurs: Get medical advice/attention
- Take off contaminated clothing and wash before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store in a well-ventilated place

Precautionary Statements - Disposal

Dispose of contents/container to approved disposal facility

Hazards not otherwise classified (HNOC)**Other information**

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS-No	Weight-%	Trade Secret
Sodium carbonate	497-19-8	2.5% - 10%	*
Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	85409-23-0	1.60	*
C12-14-16-18 alkylbenzyltrimethylammonium chloride	68391-01-5	1.60	*
Alcohols, C9-11, ethoxylated	68439-46-3	2.5% - 10%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	Show this safety data sheet to the doctor in attendance. Have the product container or label with you when calling a poison control center or doctor or going for treatment.
Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice.
Inhalation	If symptoms are experienced, move victim to fresh air. If person is not breathing call 911 or an ambulance, then give artificial respiration. Call a poison control center or doctor for further treatment advice.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. .

Most important symptoms/effects, acute and delayed

Main Symptoms The most important known symptoms and effects are described in the labelling in section 2 and/or in section 11.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water Fog, Foam, CO2 or Dry Chemical.

Unsuitable Extinguishing Media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Do not cut containers with a torch as explosion may result.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

Liquid is soluble in water & easily diluted.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with the skin and the eyes. Use personal protective equipment. Use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Transfer contaminated absorbent, soil and other materials to containers for disposal.

Methods for cleaning up Stop spill or leak if it can be done safely. Contain spill to smallest possible area. Large spills should be recovered for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Do not eat, drink or smoke when using this product. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Non-refillable container. Open dumping is prohibited. Store only in original container. Do not reuse empty container. If a leaky container must be contained within another, mark the outer container to identify the contents. Store this product away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use. Store at temperatures between 50 °F and 120°F.

Incompatible products Strong oxidizing agents. Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Review Section 3 & 4 for Exposure Guidelines.
Appropriate engineering controls

Engineering Measures Ensure adequate ventilation and that running water is available for washing eyes and skin
Individual protection measures, such as personal protective equipment

Eye/Face Protection Splash-proof chemical goggles or face shield.

Skin and body protection Impervious rubber, alkali-proof protective gloves. Impervious rubber boots & apron..

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Do not eat, drink or smoke when using this product. Practice good personal hygiene. Wash after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Liquid	Odor	Citrus
Appearance	Thin Liquid	Odor Threshold	No information available
Color	Yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	10.0 - 12.0	
Melting/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash Point	No information available	
Evaporation rate	No information available	

Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor pressure	No information available	Same as water
Vapor density	No information available	Same as water
Specific Gravity	1,02 - 1,05 g/cm ³ @°20	
Water solubility	Completely Soluble	
Solubility in other solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Viscosity, dynamic	No information available	
Explosive properties	Not explosive	
Oxidizing Properties	Not an oxidizer	

Other information

Softening point	No information available
Molecular Weight	No information available
VOC Content(%)	No information available
Density VALUE	No information available
Bulk Density VALUE	No information available

10. STABILITY AND REACTIVITY**Chemical stability**

Stable.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

High Temperatures.

Incompatible Materials

Strong oxidizing agents. Strong acids.

Hazardous Decomposition Products

Toxic hydrogen chloride, oxides of carbon & nitrogen. Toxic gases/fumes are given off during burning or thermal decomposition.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Product Information	Causes serious eye damage Causes skin irritation
Inhalation	No known effect based on information supplied.
Eye contact	Causes serious eye irritation. Serious eye damage.
Skin contact	Irritating to skin.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
Sodium carbonate 497-19-8	= 4090 mg/kg (Rat)	-	= 2300 mg/m ³ (Rat) 2 h
Alcohols, C9-11, ethoxylated 68439-46-3	= 1400 mg/kg (Rat) = 1378 mg/kg (Rat)	> 2 g/kg (Rabbit)	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Mutagenic effects No information available.
Carcinogenicity No information available.
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sodium carbonate 497-19-8	242: 120 h Nitzschia mg/L EC50	300: 96 h Lepomis macrochirus mg/L LC50 static 310 - 1220: 96 h Pimephales promelas mg/L LC50 static	265: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment****Waste Disposal Methods**

Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance on proper disposal of waste product.

Contaminated packaging

Non-refillable container. Empty containers should be triple rinsed, then offered for recycling or reconditioning; or puncture and dispose of in a sanitary landfill.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Sodium carbonate 497-19-8	Corrosive

14. TRANSPORT INFORMATION**Note**

NA1903, Disinfectant liquids, Corrosive, (contains quaternary ammonium compounds), 8, PG III, LTD QTY

DOT	Regulated
UN/ID No	UN1903
Proper shipping name	Not regulated
Hazard class	8
Packing Group	III

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	-
EINECS/ELINCS	-
ENCS	-
IECSC	Complies
KECL	-
PICCS	-
AICS	-

Legend:

TSCA - All components of this product are listed or are exempt or excluded from listing on the United States Toxic Substances Control Act Section 8(b) Inventory.

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide Label

KEEP OUT OF REACH OF CHILDREN. CORROSIVE. Causes irreversible eye damage and skin burns. This product is toxic to fish.

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards 2	Flammability 0	Instability 0	Physical and chemical hazards -
<u>HMIS</u>	Health hazard 2	Flammability 0	Physical Hazards 0	Personal protection X

Prepared By Swisher Hygiene Inc.
4725 Piedmont Row Drive
Suite 400
Charlotte, NC 28210

Issuing date 11-Oct-2011
Revision Date 05-Feb-2015

Revision Note
2

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET



Mueller Sports Medicine, Inc.
One Quench Drive, Prairie du Sac, WI 53578 USA
Phone: (608) 643-8530 or 1-800-356-9522
Fax: (608) 643-2568 or 1-800-852-4334

SDS Date: October 1, 2014
Supersedes Date: September 6, 2011

Product Name: Tape & Tuffner® Pre-Tape Spray Remover Aerosol, 10oz
Product Number: 200115

SECTION 1 — Product and Company Description

Mueller Sports Medicine, Inc.
One Quench Drive, Prairie du Sac, WI 53578 USA
Phone: (608) 643-8530 or 1-800-356-9522
Fax: (608) 643-2568 or 1-800-852-4334

For Product Information:

1-800-356-9522

For medical emergency assistance:

Infotrac . Chemical Emergency Response System
U.S.: (352) 323-3500

Chemical name or Synonym: Pressurized solution of solvents.

SECTION 2 — Chemical Composition

<u>Hazardous Components</u>	<u>CAS#</u>	<u>OSHA TWA</u>	<u>ACGIH TWA</u>	<u>Percent</u>
Heptane	64742-49-0	400 ppm	400 ppm	<45
Isopropyl Alcohol (99%)	67-63-0	400 ppm	200 ppm	<18
d-Limonene	5989-27-5	NE	NE	<11
n-Butane	106-97-8	None	1000 ppm	<21
Propane	74-98-6	1000 ppm	1000 ppm	<10

SECTION 3 — HAZARDS IDENTIFICATION

NFPA Fire: 4
Health: 2
Reactivity: 1

SECTION 4 — FIRST AID MEASURES

Flush eyes or skin with large quantities of water for a minimum of 15-20 minutes. If irritation persists, seek medical attention immediately. If difficulty breathing, remove from exposure area to a source of fresh air. If breathing difficulties do not subside, seek medical attention immediately. If ingested, drink several glasses of water or milk (if available) and seek medical attention. **DO NOT INDUCE VOMITING.** Never give anything by mouth to a person who is unconscious.

SECTION 5 — FIRE FIGHTING MEASURES

Flash Point (Method): 20°F

Flammable Limits: Lel . Unknown, Uel . Unknown

Extinguishing Media: Water, CO2, Foam, Dry Chemical

Unusual Fire and Explosion Hazard: **FLAMMABLE AEROSOL:** Temperatures in excess of 120°F may cause bursting. Inevent of fire ruptured cans contribute flammable materials.

Special Fire-Fighting Precautions: Keep aerosols cooled to prevent bursting.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled: Eliminate all potential sources of ignition. Contain and collect any free liquid with an inert/absorbent material.

Waste Disposal Method: Dispose of in accordance with all applicable Federal, State and local regulations.

Potential EPA Hazardous Waste Codes(s): D001

SECTION 7 — HANDLING AND STORAGE

Steps to be taken in handling and storage: NFPA %LEVEL 3 AEROSOLS+: Do not spray near heat, sparks, or open flame. Store at 40-90°F. Follow label use directions.

KEEP OUT OF THE REACH OF CHILDREN.

SECTION 8 — EXPOSURE CONTROLS / PERSONAL PROTECTION

Routes of Entry: Inhalation, Skin, Eye, Ingestion

Irritates: Kidneys, Eyes, Skin, Liver, Central Nervous System, Mucous Membrane, and Respiratory System.

Carcinogenicity: None Known

Medical Conditions Generally Aggravated by Exposure: None Known.

Signs and Symptoms of Exposure:

Skin and eye contact may cause irritation to mild burn like symptoms. Direct contact with propellant may cause symptoms similar to frostbite like exposure. Inhalation of vapors may cause respiratory tract irritation. Any accidental ingestion may cause irritation to the mouth and throat. Ingestion of product may cause an aspiration type hazard.

Personal Protective Equipment:

Ventilation: Local Exhaust: Recommended

Mechanical: Recommended

Special: Not Required

Respiratory (specify type): Use NIOSH/MSHA approved respirator with chemical cartridge, airline or SCBA as appropriate.

Eye Protection: Recommended.

Gloves: Recommended.

Other Protective Clothing and Equipment: Not Required

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Flammable Aerosol

Appearance: Clear liquid with citrus odor

Vapor Pressure: 30 psig

Specific Gravity (water =1): 0.7326

Solubility in Water: Insoluble

Boiling Point: Not Established

Vapor Density: Not Established

Evaporation Rate: Not Established

pH: Not Applicable

%Volatiles by Weight: 100

SECTION 10 — STABILITY AND REACTIVITY

Chemical Stability: Stable

Incompatibility with Other Substances: Oxidizers

Hazardous Decomposition Products: With extreme heat or fire typical hydrocarbon by-products are released.

Hazardous Polymerizations: Will not occur.

Volatile Organic Compounds (VOC) = 100%

SECTION 11 — TOXICITY TESTS

None

SECTION 12 — ENVIRONMENTAL TESTS

None

SECTION 13 — DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Dispose of in accordance with all applicable Federal, State and local regulations.

SECTION 14 — TRANSPORT INFORMATION

DOT Proper Shipping Name and Number:

Consumer Commodity, ORM-D

Aerosols (UN1950 Aerosols, Class 2.1, Limited Quantity)

SECTION 15 — REGULATORY INFORMATION

OSHA Compliance: MSDS prepared in accordance with 29CFR 1910.1200 to comply with the OSHA Hazard Communication Standard.

SECTION 16 — OTHER INFORMATION

None.

1	Identification of the preparation and the supplying Company	Teknar® HP-D Killgerm Chemicals Ltd, Denholme Drive, Ossett, West Yorkshire, WF5 9NA. Tel: +44 (0)1924 268450 Fax: (0)1924 265033 Email: technical@Killgerm.com		
2	Hazards identification	Not classified.		
3	Composition and information on ingredients	<u>Bacillus thuringiensis var israeliensis</u> (serotype H - 14) contains 3000 AA units per mg 1.6%/w/w Other components 98.4%/w/w		
4	First Aid measures	Ingestion:	Wash out mouth with water. Get medical attention.	
		Inhalation:	Move to fresh air.	
		Skin contact:	Remove contaminated clothing. Wash off with soap and water.	
		Eye contact:	Flush thoroughly with eye-wash solution or clean water for 15 minutes.	
		Advice to doctor:	Product contains <u>Bacillus thuringiensis var israeliensis</u> .	
5	Fire-fighting measures	Extinguishers:- Use water spray, dry powder, or foam fire extinguishers. Advise water authority if fire fighting water has entered drains.		
6	Accidental release measures	Spillage (containment and disposal):- Wear appropriate PPE. Absorb in sand, earth or proprietary product, shovel into marked container and contact a waste disposal firm or the supplier for disposal advice. Wash area with water.		
7	Handling and storage	This product is subject to the Food and Environmental Protection Act 1985, and the Control of Pesticides Regulations 1986 made under it. The product must be used and stored in accordance with the product label. Precautions in use: For use only by professional operators. Wear suitable protective clothing (coveralls) and synthetic rubber/PVC gloves when using. Avoid excessive contamination of coveralls and launder regularly. Wash hands and exposed skin before meals and after use. Wash splashes and exposed skin before meals and after use. Wash splashes from skin or eyes immediately. This material and its container must be disposed of in a safe way. Storage and transport precautions: Store in a cool dry place. Protect the container from frost. Protect from heat. Activity may be impaired by prolonged storage above 32°C. Keep in original container, tightly closed in a safe place. Keep in a safe place away from children.		
8	Exposure controls and personal protection	PPE Item	In Use	Spillage
		Respirator		
		Gloves	If required, unlined synthetic rubber	unlined synthetic rubber eg Nitrile eg Nitrile
		Overall	Basic type to ISO 6530 eg EP	Basic type to ISO 6530 eg EP
		Goggles/ Face shield	Faceshield to BS 2092 IC if required	Faceshield to BS 2092 IC
9	Physical and chemical properties	Appearance:	Medium brown coloured flowable suspension	
		pH:	4.5	
		Flash point:	not flammable	
		Flammability:	not flammable	
		Bulk density:	0.90	
		Solubility:	Dispersible in water	
		Odour:	Yeasty	
		Incompatibility:	Not a reactive substance.	
10	Stability and reactivity	Not a reactive preparation.		
11	Toxicological information	Routes of entry/symptoms of contact: Inhalation: Risk via this route is very low. Skin and eyes: May be irritating to skin and eyes. Ingestion: May be irritating to mouth and gastro intestinal tract.		
12	Ecological information	Product is biodegradable and not a danger to water users. The local office of the National Rivers Authority (NRA) should be consulted before using this product.		
13	Disposal considerations	Empty containers:	Do not re-use - Empty completely and wash out. Dispose of as below.	
		Unused/recovered materials:)	Do not dispose of in domestic refuse	
		Tank washings:)	Treat as controlled waste. EWC code 15 01 02.	
		Contaminated PPE:)	Consult supplier for advice.	
14	Transport information	Not classified as hazardous for transport.		
15	Regulatory information	Approved under COPR. HSE no. 5355. Insecticide (IP) Refer to other relevant measures such as Health & Safety at Work etc Act and the COSHH regulations. The information contained in this data sheet does not constitute the user's own assessment of workplace risks as required by legislation. R phrases – none applicable.		

16 Other information

Shelf-Life

It is recommended that users treat the material as having a shelf-life of one year. Although shelf-life actually begins from the date of manufacture, there is a sufficient safety margin in the stability of the product to allow users to regard shelf-life as beginning when they receive the product. For instance, product purchased early in the season of one year may be used in the following year provided it is used early in the season.

Use only in accordance with label instructions.

Observe statutory conditions of use on the label.

Use biocides safely. Always read the label and product safety information before use.

(R) - Teknar is a Trade Mark of Valent Biosciences Corporation.

The information contained within this data sheet is strictly for general guidance only and should not be relied upon over and above this. This data sheet is intended to provide general health and safety guidance on the handling, storage and transportation of the preparation. The information provided in this data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted by Killgerrn Chemicals Limited for any loss, injury or damage arising from any failure to comply with the information and advice contained within this data sheet and/or failure to comply with the manufacturer's guidelines, product label data and any associated technical usage literature.

Incorporates the REACH requirement changes to safety data sheets.



SAFETY DATA SHEET

1. Identification

Product identifier Thiosulfate N/10
Product code R-0697
Recommended use Use as directed by manufacturer for purposes directly related to water testing.
Recommended restrictions None known

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Taylor Technologies, Inc.
Address 31 Loveton Circle
Sparks, MD 21152
United States
Telephone (410) 472-4340 Monday–Friday, 8:00 a.m.–4:30 p.m.
Website www.taylortechnologies.com
E-mail Not available
Emergency phone number (800) 837-8548

2. Hazard(s) identification

Physical hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.
Health hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.
Environmental hazards Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
Label elements None required
Signal word None required
Hazard statement None required
Precautionary statement
Prevention None required
Response None required
Storage None required
Disposal None required
Hazard(s) not otherwise classified None
Supplemental information None

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Deionized water	Dihydrogen oxide	7732-18-5	95–99
Sodium thiosulfate pentahydrate	Thiosulfuric acid, disodium salt, pentahydrate; Sodium thiosulfate	10102-17-7	0.1–5
Other components below reportable levels			0.01–0.1

4. First-aid measures

Inhalation Move to fresh air. Give oxygen or artificial respiration if needed. Get medical attention immediately.

Skin contact	Immediately wash skin with soap and water. If symptoms persist or in all cases of concern, seek medical advice.
Eye contact	Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice.
Ingestion	Treat symptomatically. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If symptoms persist or in all cases of concern, seek medical advice.
Most important symptoms/effects, acute and delayed	Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness, edema, drying, and cracking of the skin. Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging and tearing. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. Firefighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Firefighting equipment/instructions	Firefighters should wear full protective gear. Evacuate the area promptly. Fight fire from upwind to avoid exposure to combustion products. Cool containers/tanks with water spray. Do not get water inside container. Move containers from fire area if it can be done without risk. Prevent fire-extinguishing water from contaminating surface water or the ground water system.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted
Hazardous combustion products	Carbon oxides. Hydrogen sulfide. Sulfur oxides. Other irritating fumes and smoke.

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.
Methods and materials for containment and cleaning up	<p>Large Spills: Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewer, basements, or confined areas. Following product recovery, flush area with water.</p> <p>Small Spills: Absorb spillage with noncombustible, absorbent material. Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for reuse. For waste disposal, refer to section 13 of the SDS. Contaminated absorbent material may pose the same hazards as the spilled product.</p> <p>In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.</p>
Environmental precautions	Avoid discharge into drains, watercourses, or onto the ground.

7. Handling and storage

Precautions for safe handling	Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.
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Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (refer to section 10 of the SDS). Protect against physical damage. Use care in handling/storage.

8. Exposure controls/personal protection

Occupational exposure limits

No occupational exposure limits noted for the ingredient(s)

Biological limit values

No biological exposure limits noted for the ingredient(s)

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield. Provide an emergency eyewash fountain and quick-drench shower in the immediate work area.

Skin protection

Hand protection

Wear appropriate chemical-resistant gloves. Advice should be sought from glove suppliers.

Other

Wear appropriate chemical-resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

Thermal hazards

When necessary, wear appropriate thermal protective clothing.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contamination. Avoid breathing mist or vapor.

9. Physical and chemical properties

Appearance

Physical state

Liquid

Form

Liquid

Color

Clear colorless or nearly colorless

Odor

Odorless

Odor threshold

Not available

pH

9.6

Melting point/freezing point

Not available

Initial boiling point and boiling range

212°F (110°C)

Flash point

Not applicable (does not burn)

Evaporation rate

Not available

Flammability (solid, gas)

Not applicable

Upper/lower flammability or explosive limits

Flammability limit, lower (%)

Not applicable

Flammability limit, upper (%)

Not applicable

Explosive limit, lower (%)

Not applicable

Explosive limit, upper (%)

Not applicable

Vapor pressure

17 mm Hg

Vapor density

0.6

Relative density

1.00 g/cm³

Solubility(ies)	
Solubility (water)	Soluble in all proportions
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
Viscosity	Not available
Other information	
Explosive properties	Not applicable
Oxidizing properties	Not applicable
Percent volatile	97%
Specific gravity	1.00

10. Stability and reactivity

Reactivity	This product is stable and nonreactive under normal conditions of use, storage, and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use
Conditions to avoid	Contact with incompatible materials. Do not use in areas without adequate ventilation.
Incompatible materials	Oxidizing agents. Strong acids.
Hazardous decomposition products	None known. For hazardous combustion products, refer to section 5 of the SDS.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system
Skin contact	May cause slight or mild transient irritation
Eye contact	May cause temporary irritation
Ingestion	May cause discomfort

Most important symptoms/effects, acute and delayed Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness, edema, drying, and cracking of the skin. Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging and tearing. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Acute toxicity This product is not classified as an acute toxicity hazard. See below for individual ingredient acute toxicity data.

Product	Species	Test Results
Sodium thiosulfate pentahydrate (CAS 10102-17-7)		
Acute		
<i>Dermal</i>		
LD ₅₀	Rabbit	Not available
<i>Inhalation</i>		
LC ₅₀	Rat	Not available
<i>Oral</i>		
LD ₅₀	Rat	>5000 mg/kg
Deionized water (CAS 7732-18-5)		
Acute		
<i>Dermal</i>		
LD ₅₀	Rabbit	Not available
<i>Inhalation</i>		
LC ₅₀	Rat	Not available
<i>Oral</i>		
LD ₅₀	Rat	>89840 mg/kg

Skin corrosion/irritation	May cause slight or mild transient irritation
Serious eye damage/eye irritation	May cause temporary irritation
Respiratory sensitization	Not expected to be a respiratory sensitizer
Skin sensitization	Not expected to be a skin sensitizer
Germ cell mutagenicity	Not expected to be mutagenic
Carcinogenicity	This product is not considered to be a carcinogen by IARC, NTP, or OSHA or U.S. ACGIH.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity, single exposure	Not classified as a specific target organ toxicity – single exposure
Specific target organ toxicity, repeated exposure	Not classified as a specific target organ toxicity – repeated exposure
Aspiration toxicity	Not expected to be an aspiration hazard
Chronic effects	Frequent or prolonged contact may dry the skin, leading to discomfort and dermatitis.

12. Ecological information

Ecotoxicity	This product is not classified as environmentally hazardous; however, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	Not available
Bioaccumulative potential	Not available
Mobility in soil	Not available
Other adverse effects	No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion with the user, the producer, and the waste disposal company.
Waste from residues/unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (refer to Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste-handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transportation information

DOT	Not regulated as dangerous goods
IATA	Not regulated as dangerous goods
IMDG	Not regulated as dangerous goods
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	This mixture is not intended to be transported in bulk.

15. Regulatory information

U.S. federal regulations	This product is not known to be a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory list.
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TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

SARA 304 Emergency Release Notification

Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate hazard – no

Delayed hazard – no

Fire hazard – no

Pressure hazard – no

Reactivity hazard – no

SARA 302 Extremely Hazardous Substance

Not regulated

SARA 311/312 Hazardous Chemical

Not regulated

SARA 313 (TRI reporting)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAP)

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

Safe Drinking Water Act (SDWA)

Not regulated

U.S. state regulations

California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not regulated

Massachusetts Right-to-Know Act

Not regulated

New Jersey Worker and Community Right-to-Know Act

Not regulated

Pennsylvania Worker and Community Right-to-Know Act

Not regulated

Rhode Island Right-to-Know Act

Not regulated

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International inventories

Country(ies) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	yes
Canada	Domestic Substances List (DSL)	yes
Canada	Non-Domestic Substances List (NDSL)	no
China	Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)	yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	yes
Europe	European List of Notified Chemical Substances (ELINCS)	no
Japan	Existing and New Chemical Substances (ENCS)	yes
Korea	Existing Chemicals List (ECL)	yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA)	yes

*A "yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(ies).

A "no" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(ies).

16. Other information, including date of preparation or last revision

List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists
AICS: Australian Inventory of Chemical Substances
CAA: Clean Air Act
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
CFR: Code of Federal Regulations
CSA: Canadian Standards Association
DEA: Drug Enforcement Agency
DOT: Department of Transportation
DSL: Domestic Substances List
EC: effective concentration
ECL: Existing Chemicals List
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
ENCS: Existing and New Chemical Substances
EPA: Environmental Protection Agency
HAP: hazardous air pollutants
HMIS: Hazardous Materials Identification System
HNOC: hazards not otherwise classified
HPA: Hazardous Products Act
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
ICAO: International Civil Aviation Organization
IECSC: Inventory of Existing Chemical Substances Produced or Imported in China
IMDG: International Maritime Dangerous Goods
IUCLID: International Uniform Chemical Information Database
LC: lethal concentration
LD: lethal dose
MARPOL: marine pollution
MSHA: Mine Safety and Health Administration
NDSL: Non-Domestic Substances List
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NOEC: no observable effect concentration
NTP: National Toxicology Program
NZIoC: New Zealand Inventory of Chemicals
OECD: Organisation for Economic Co-operation and Development
OEL: occupational exposure limits
OSHA: Occupational Safety and Health Administration
PEL: permissible exposure limits

PICCS: Philippine Inventory of Chemicals and Chemical Substances
PPE: personal protective equipment
RCRA: Resource Conservation and Recovery
Act RQ: reportable quantity
RTECS: Registry of Toxic Effects of Chemical Substances
RTK: right to know
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
SDWA: Safe Drinking Water Act
STEL: short-term exposure limit
TLV: threshold limit values
TSCA: Toxic Substances Control Act
TWA: time-weighted average
VOC: volatile organic compounds
WEL: workplace exposure limit

Disclaimer

The information in the Safety Data Sheet is offered for your consideration and guidance for safe handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

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Issue date

May 2015

Last revision

May 2015



SAFETY DATA SHEET

1. Identification

Product identifier Total Alkalinity Indicator
Product code R-0008
Recommended use Use as directed by manufacturer for purposes directly related to water testing.
Recommended restrictions None known

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Taylor Technologies, Inc.
Address 31 Loveton Circle
Sparks, MD 21152
United States
Telephone (410) 472-4340 Monday–Friday, 8:00 a.m.–4:30 p.m.
Website www.taylortechnologies.com
E-mail Not available
Emergency phone number (800) 837-8548

2. Hazard(s) identification

Physical hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.
Health hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.
Environmental hazards Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.
Label elements None required
Signal word None required
Hazard statement None required
Precautionary statement
Prevention None required
Response None required
Storage None required
Disposal None required
Hazard(s) not otherwise classified None
Supplemental information None

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Deionized water	Dihydrogen oxide	7732-18-5	95–99
Other components below reportable levels			0.1–5

4. First-aid measures

Inhalation Move to fresh air. Give oxygen or artificial respiration if needed. Get medical attention immediately.
Skin contact Immediately wash skin with soap and water. If symptoms persist or in all cases of concern, seek medical advice.

Eye contact	Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice.
Ingestion	Treat symptomatically. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If symptoms persist or in all cases of concern, seek medical advice.
Most important symptoms/effects, acute and delayed	Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness, edema, drying, and cracking of the skin. Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging and tearing. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. Firefighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Firefighting equipment/instructions	Firefighters should wear full protective gear. Evacuate the area promptly. Fight fire from upwind to avoid exposure to combustion products. Cool containers/tanks with water spray. Do not get water inside container. Move containers from fire area if it can be done without risk. Prevent fire-extinguishing water from contaminating surface water or the ground water system.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted
Hazardous combustion products	Carbon oxides. Other irritating fumes and smoke.

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.
Methods and materials for containment and cleaning up	<p>Large Spills: Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewer, basements, or confined areas. Following product recovery, flush area with water.</p> <p>Small Spills: Absorb spillage with noncombustible, absorbent material. Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for reuse. For waste disposal, refer to section 13 of the SDS. Contaminated absorbent material may pose the same hazards as the spilled product.</p> <p>In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.</p>
Environmental precautions	Avoid discharge into drains, watercourses, or onto the ground.

7. Handling and storage

Precautions for safe handling	Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.
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Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (refer to section 10 of the SDS). Protect against physical damage. Use care in handling/storage.

8. Exposure controls/personal protection

Occupational exposure limits

No occupational exposure limits noted for the ingredient(s)

Biological limit values

No biological exposure limits noted for the ingredient(s)

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield. Provide an emergency eyewash fountain and quick-drench shower in the immediate work area.

Skin protection

Hand protection

Wear appropriate chemical-resistant gloves. Advice should be sought from glove suppliers.

Other

Wear appropriate chemical-resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

Thermal hazards

When necessary, wear appropriate thermal protective clothing.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contamination. Avoid breathing mist or vapor.

9. Physical and chemical properties

Appearance

Physical state

Liquid

Form

Liquid

Color

Dark green

Odor

Odorless

Odor threshold

Not available

pH

8.5

Melting point/freezing point

Not available

Initial boiling point and boiling range

212°F (110°C)

Flash point

Not applicable (does not burn)

Evaporation rate

Not available

Flammability (solid, gas)

Not applicable

Upper/lower flammability or explosive limits

Flammability limit, lower (%)

Not applicable

Flammability limit, upper (%)

Not applicable

Explosive limit, lower (%)

Not applicable

Explosive limit, upper (%)

Not applicable

Vapor pressure

17 mm Hg

Vapor density

0.6

Relative density

1.00 g/cm³

Solubility(ies)	
Solubility (water)	Soluble in all proportions
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
Viscosity	Not available
Other information	
Explosive properties	Not applicable
Oxidizing properties	Not applicable
Percent volatile	99%
Specific gravity	1.00

10. Stability and reactivity

Reactivity	This product is stable and nonreactive under normal conditions of use, storage, and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use
Conditions to avoid	Contact with incompatible materials. Do not use in areas without adequate ventilation.
Incompatible materials	Oxidizing agents
Hazardous decomposition products	None known. For hazardous combustion products, refer to section 5 of the SDS.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system
Skin contact	May cause slight or mild transient irritation
Eye contact	May cause temporary irritation
Ingestion	May cause discomfort

Most important symptoms/effects, acute and delayed Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness, edema, drying, and cracking of the skin. Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging and tearing. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Acute toxicity This product is not classified as an acute toxicity hazard. See below for individual ingredient acute toxicity data.

Components	Species	Test Results
Deionized water (CAS 7732-18-5)		
Acute		
<i>Dermal</i>		
LD ₅₀	Rabbit	Not available
<i>Inhalation</i>		
LC ₅₀	Rat	Not available
<i>Oral</i>		
LD ₅₀	Rat	>89840 mg/kg
Skin corrosion/irritation	May cause slight or mild transient irritation	
Serious eye damage/eye irritation	May cause temporary irritation	
Respiratory sensitization	Not expected to be a respiratory sensitizer	
Skin sensitization	Not expected to be a skin sensitizer	
Germ cell mutagenicity	Not expected to be mutagenic	

Carcinogenicity	This product is not considered to be a carcinogen by IARC, NTP, OSHA, or U.S. ACGIH.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)	
Not regulated	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity, single exposure	Not classified as a specific target organ toxicity – single exposure
Specific target organ toxicity, repeated exposure	Not classified as a specific target organ toxicity – repeated exposure
Aspiration toxicity	Not expected to be an aspiration hazard
Chronic effects	Frequent or prolonged contact may dry the skin, leading to discomfort and dermatitis.

12. Ecological information

Ecotoxicity	This product is not classified as environmentally hazardous; however, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	Not available
Bioaccumulative potential	Not available
Mobility in soil	High water solubility indicates a high mobility in soil.
Other adverse effects	No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion with the user, the producer, and the waste disposal company.
Waste from residues/unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (refer to Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste-handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transportation information

DOT	Not regulated as dangerous goods
IATA	Not regulated as dangerous goods
IMDG	Not regulated as dangerous goods
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	This mixture is not intended to be transported in bulk.

15. Regulatory information

U.S. federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory list.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated
CERCLA Hazardous Substance (40 CFR 302.4)	Not regulated
SARA 304 Emergency Release Notification	Not regulated
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)	Not regulated

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate hazard – no
Delayed hazard – no
Fire hazard – no
Pressure hazard – no
Reactivity hazard – no

SARA 302 Extremely Hazardous Substance

Not regulated

SARA 311/312 Hazardous Chemical

Not regulated

SARA 313 (TRI reporting)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAP)

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

Safe Drinking Water Act (SDWA)

Not regulated

U.S. state regulations

California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not regulated

Massachusetts Right-to-Know Act

Not regulated

New Jersey Worker and Community Right-to-Know Act

Not regulated

Pennsylvania Worker and Community Right-to-Know Act

Not regulated

Rhode Island Right-to-Know Act

Not regulated

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International inventories

Country(ies) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	yes
Canada	Domestic Substances List (DSL)	yes
Canada	Non-Domestic Substances List (NDSL)	no
China	Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)	yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	yes
Europe	European List of Notified Chemical Substances (ELINCS)	no
Japan	Existing and New Chemical Substances (ENCS)	no
Korea	Existing Chemicals List (ECL)	yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA)	yes

*A "yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(ies).

A "no" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(ies).

16. Other information, including date of preparation or last revision

List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists
AICS: Australian Inventory of Chemical Substances
CAA: Clean Air Act
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
CFR: Code of Federal Regulations
CSA: Canadian Standards Association
DEA: Drug Enforcement Agency
DOT: Department of Transportation
DSL: Domestic Substances List
EC: effective concentration
ECL: Existing Chemicals List
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
ENCS: Existing and New Chemical Substances
EPA: Environmental Protection Agency
HAP: hazardous air pollutants
HMIS: Hazardous Materials Identification System
HNOC: hazards not otherwise classified
HPA: Hazardous Products Act
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
ICAO: International Civil Aviation Organization
IECSC: Inventory of Existing Chemical Substances Produced or Imported in China
IMDG: International Maritime Dangerous Goods
IUCLID: International Uniform Chemical Information Database
LC: lethal concentration
LD: lethal dose
MARPOL: marine pollution
MSHA: Mine Safety and Health Administration
NDSL: Non-Domestic Substances List
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NOEC: no observable effect concentration
NTP: National Toxicology Program
NZIoC: New Zealand Inventory of Chemicals
OECD: Organisation for Economic Co-operation and Development
OEL: occupational exposure limits
OSHA: Occupational Safety and Health Administration
PEL: permissible exposure limits
PICCS: Philippine Inventory of Chemicals and Chemical Substances
PPE: personal protective equipment
RCRA: Resource Conservation and Recovery Act
Act RQ: reportable quantity
RTECS: Registry of Toxic Effects of Chemical Substances
RTK: right to know
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
SDWA: Safe Drinking Water Act
STEL: short-term exposure limit
TLV: threshold limit values
TSCA: Toxic Substances Control Act
TWA: time-weighted average
VOC: volatile organic compounds
WEL: workplace exposure limit

Disclaimer

The information in the Safety Data Sheet is offered for your consideration and guidance for safe handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

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Issue date

April 2015

Last revision

April 2015

MATERIAL SAFETY DATA SHEET

Ultra Duster

Revised: 1/11/2016

SECTION I - CHEMICAL INFORMATION

Trade Name: HFC-152a

Chemical Name: Difluoroethane, R152a

Product Supplied By: AW Distributing, Inc.

Address & Phone #: 2024 Middlefield Rd., Redwood City, CA 94063

Emergency Phone #: Chemtrec 1-800-424-9300

Mfg. Model No.: AE420BWON

SECTION II - HAZARDOUS INGREDIENTS

Ingredients CAS # % TLV PEL UNITS

1,1-Difluoroethane 75-37-6 100

SECTION III - PHYSICAL DATA

Boiling Point (°F) -25 C (-13F) **Specific Gravity (H₂O=1)**

Vapor Pressure (MM Hg) 87 psia at 25 deg C (77 deg F)

Percent Volatile by Vol. 100 WT %

Vapor Density (Air=1) 2.4 at 25 deg C (77 deg F) **Density** 0.90 g/cc at 25 deg C (77 deg F) - Liquid

Solubility in Water 0.28 WT% at 25 deg C (77 deg F)

Evap Rate (Ether = 1)

Appearance and Odor Slight ethereal, Clear, colorless

Form Gas

SECTION IV - HAZARDOUS REACTIVITY

Instability - Stable, however, avoid open flames and high temperatures.

Incompatibility - Incompatible with alkaline or alkaline earth metals.

Decomposition - Decomposition products are hazardous. This material can be decomposed by high temperatures (open flames, glowing metal surfaces, etc.) forming hydrofluoric acid and possible carbonyl fluoride.

Polymerization - Polymerization will not occur.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point <-50 C (<-58 F) **Flammable Limits LEL** - 3.9 Auto Ig. 454C **UEL** - 16.9

Fire and Explosion Hazards - Flammable. Cylinders are equipped with temperature and pressure relief devices but still may rupture under fire conditions. Use water spray to cool cylinders and tanks.

Extinguishing Media - Water spray, Water fog, Dry chemical.

Special Fire Fighting Procedures - Keep container cool with water spray. If gas exiting container ignites, stop flow of gas. Do not put out the fire unless leak can be stopped immediately. Self-contained breathing apparatus (SCBA) is required if containers rupture and contents are released under fire conditions.

National Fire Protection Association (NFPA 30B) - Level 1 Aerosols (lowest flammability rating)

Consumer Products Safety Commission (CPSC 1500.3 (c)(6).16CFR - Not flammable

SECTION VI - HEALTH HAZARD INFORMATION

Potential Health Effects:

Inhalation of high concentrations of vapor is harmful and may cause heart irregularities, unconsciousness, or death.

Intentional misuse or deliberate inhalation may cause death without warning. Vapor reduces oxygen available for breathing and is heavier than air. Liquid contact can cause frostbite.

Human Health Effects:

Contact with the liquid may cause frostbite. Overexposure by inhalation may include nonspecific discomfort, such as nausea, headache, or weakness; or temporary nervous system depression with anesthetic effects such as dizziness, headache, confusion, incoordination and loss of consciousness. Higher exposures (>20%) may cause temporary lung irritation effects with cough, discomfort, difficulty breathing, or shortness of breath; or temporary alteration of the heart's electrical activity with irregular pulse, palpitations, or inadequate circulation, abnormal kidney function as detected by laboratory tests. Gross overexposure may be fatal.

Individual with preexisting diseases of the central nervous or cardiovascular system may have increased susceptibility to the toxicity of excessive exposures.

First Aid

Eyes: Immediately flush eyes with large amounts of water for at least 15 minutes while holding the eyelids open. Get prompt medical attention.

Skin: Immediately remove contaminated clothing; wash skin with large amounts of water for at least 15 minutes. Treat for frostbite with gentle warming affected area if necessary. Get prompt medical attention.

Inhalation: Move victim to fresh air and restore breathing if necessary. Stay with victim until arrival of emergency medical personnel.

Ingestion: Contact local Poison Control Center or physician immediately!

SECTION VII - TOXICOLOGICAL INFORMATION

The compound is untested for skin or eye irritation, and for animal sensitization. Effects in animals from single, high exposure by inhalation include labored breathing, lung irritation, lethargy, incoordination, and loss of consciousness. Cardiac sensitization occurred in dogs exposed to a concentration of 150,000 ppm in air and given an intravenous epinephrine challenge. Effects of repeated exposure include increased urinary fluorides, reduced kidney weight, and reversible kidney changes. The effects of a single, high oral dose include weight loss and lethargy.

Tests in animals demonstrate no carcinogenic activity or developmental effects. Tests in animals for reproductive effects have not been performed. This compound does not produce genetic damage in bacterial cell cultures but has not been tested in animals.

SECTION VIII - TRANSPORTATION INFORMATION**Shipping Information****DOT - Domestic Ground Transportation**

Proper Shipping Name DIFLUOROETHANE, R152a

Hazard Class 2.1

I.D. No. (UN/NA) UN 1950

Shipping Paper Information: None required

Mark Packages with: DIFLUOROETHANE, R152a, UN 1950, ORM-D

Placarding: None required

SECTION IX - SPECIAL PROTECTION INFORMATION

Waste Disposal Method - Reclaim by distillation, incinerate, or remove to a permitted waste facility. Comply with Federal, State and Local regulations.

This material may be a RCRA Hazardous waste upon disposal due to the ignitability characteristic.

PPE-PERSONAL PROTECTIVE EQUIPMENT REQUIRED: NONE

VectoBac® G

MSDS# BIO-0057 Rev. 6

ISSUED 10/09/14

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION
-----MATERIAL NAME: **VectoBac® G**

EPA Registration No. 73049-10

MANUFACTURER: Valent BioSciences Corporation

870 Technology Way

Libertyville, Illinois 60048

EMERGENCY TELEPHONE NUMBERS

Emergency Health or Spill:

Outside the United States: 651-632-6184

Within the United States: 877-315-9819

2. COMPOSITION/INFORMATION ON INGREDIENTS
-----INGREDIENT NAME: *Bacillus thuringiensis*, subsp. *israelensis*,
strain AM65-52

CONCENTRATION: 2.80 %

CAS/RTECS NUMBERS: 68038-71-1 / N/A

OSHA-PEL 8HR TWA: N/L

STEL: N/L

CEILING: N/L

ACGIH-TLV 8HR TWA: N/L

STEL: N/L

CEILING: N/L

OTHER 8HR TWA: N/A

LIMITS STEL: N/A

CEILING: N/A

INGREDIENT NAME: Inert Ingredients - identity withheld as a Trade
Secret

CONCENTRATION: 97.20 %

CAS/RTECS NUMBERS: N/A / N/A

OSHA-PEL 8HR TWA: N/L

STEL: N/L

CEILING: N/L

ACGIH-TLV 8HR TWA: N/L

STEL: N/L

CEILING: N/L

OTHER 8HR TWA: N/A

LIMITS STEL: N/A

CEILING: N/A

VectoBac® G

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ISSUED 10/09/14

2. COMPOSITION/INFORMATION ON INGREDIENTS, continued

EEC (European Community): N/A
Symbol Designation: N/A
Risk Phrases: N/A
Safety Phrases: N/A

3. HAZARDS INFORMATION

EMERGENCY OVERVIEW: Product is non-toxic by ingestion, skin contact, or inhalation. Direct contact with eyes or skin may cause mild irritation.

ROUTE(S) OF ENTRY: Skin: No
 Inhalation: No
 Ingestion: No

SKIN CONTACT: Non-irritant

SKIN SENSITIZATION: N/D

EYE CONTACT: Non-irritant

TARGET ORGANS: N/D

CARCINOGENICITY RATING: NTP: N/L IARC: N/L OSHA: N/L ACGIH: N/L
None

SIGNS AND SYMPTOMS: Direct contact with eyes or skin may cause mild irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: N/D.

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4. FIRST AID MEASURES

EYES: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

SKIN: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INGESTION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INHALATION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

5. FIRE FIGHTING PROCEDURES

FLASH POINT: N/A

FLASH POINT METHOD: N/D

LOWER EXPLOSIVE LIMIT(%): N/D

UPPER EXPLOSIVE LIMIT(%): N/D

AUTOIGNITION TEMPERATURE: N/D

FIRE & EXPLOSION HAZARDS: Non-flammable and no explosive properties.

EXTINGUISHING MEDIA: Use appropriate medium for underlying cause of fire.

FIRE FIGHTING INSTRUCTIONS: Wear protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

SPILL OR RELEASE PROCEDURES: Recover product. Place into appropriate container for disposal. Avoid dust. Ventilate and wash spill area.

VectoBac® G

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7. HANDLING AND STORAGE

HANDLING: N/D.

STORAGE: Store in a cool, dry place.

SPECIAL PRECAUTIONS: N/A

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust.

RESPIRATORY PROTECTION: Not usually required. However, mixers/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist respirator meeting NIOSH standards of at least N-95, R-95 or P-95.

SKIN PROTECTION: Impervious gloves, clothing to minimize skin contact.

EYE PROTECTION: Not usually required. If necessary, use safety glasses or goggles.

OTHER PROTECTION: Wash thoroughly with soap and water after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Granular solid.

ODOR: Mild

BOILING POINT: N/A

MELTING/FREEZING POINT: N/A

VAPOR PRESSURE (mm Hg): N/A

VAPOR DENSITY (Air=1): N/A

EVAPORATION RATE: N/D

BULK DENSITY: 27 ± 4 lb/cu.ft.

SPECIFIC GRAVITY: N/D

SOLUBILITY: N/A

pH: 5.4 ± 1.0 (10% slurry)

VISCOSITY: N/A

VectoBac® G

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10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

INCOMPATIBILITIES: Alkalinity inactivates product.

HAZARDOUS DECOMPOSITION PRODUCTS: N/D.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

ORAL LD50: LD50 (rat) > 5,000 mg/kg

DERMAL LD50: LD50 (rabbit) > 5,000 mg/kg

INHALATION LC50: N/D. No lethality was observed in rats after a 4 hour exposure at the highest obtainable inhalation exposure chamber concentration (2.84 mg/l) to VectoBac® Technical Powder.

CORROSIVENESS: N/D. Not expected to have any corrosive properties.

DERMAL IRRITATION: N/D. Transient, slight or mild irritation noted in a dermal toxicity study with VectoBac® Technical Powder.

OCULAR IRRITATION: N/D. VectoBac® Technical Powder was mildly irritating in an eye irritation test in rabbits.

DERMAL SENSITIZATION: N/D

SPECIAL TARGET ORGAN EFFECTS: N/D

CARCINOGENICITY INFORMATION: N/D. None of the components are classified as carcinogens.

VectoBac® G

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12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: N/D

13. DISPOSAL CONSIDERATIONS

Do not contaminate potable water, food or feed by storage or disposal.
Dispose of product in accordance with federal, state, and local regulations.

WASTE DISPOSAL METHODS:

Pesticide Disposal: Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORTATION INFORMATION

DOT STATUS: Not Regulated

PROPER SHIPPING NAME: N/A

HAZARD CLASS: N/A

UN NUMBER: N/A

PACKING GROUP: N/A

REPORTABLE QUANTITY: N/A

IATA/ICAO STATUS: Not Regulated

PROPER SHIPPING NAME: N/A

HAZARD CLASS: N/A

UN NUMBER: N/A

PACKING GROUP: N/A

REPORTABLE QUANTITY: N/A

IMO STATUS: Not Regulated

PROPER SHIPPING NAME: N/A

HAZARD CLASS: N/A

UN NUMBER: N/A

PACKING GROUP: N/A

REPORTABLE QUANTITY: N/A

FLASH POINT: N/A

VectoBac® G
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15. REGULATORY INFORMATION

TSCA STATUS: Exempt

CERCLA STATUS: N/D

SARA STATUS: N/D

RCRA STATUS: N/D

PROP 65 (CA): N/D

16. OTHER INFORMATION

REASON FOR ISSUE: Strain number added.

APPROVAL DATE: 10/09/14

SUPERSEDES DATE: 01/08/12

LEGEND: N/A = Not Applicable

N/D = Not Determined

N/L = Not Listed

L = Listed

C = Ceiling

S = Short-term

(R) = Registered Trademark of Valent BioSciences

(TM) = Registered Trademark of Valent BioSciences

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Libertyville, IL 60048 - 800-323-9597

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Phone#: (858) 292-8111

Latest Revision Date...01/01/11
Print Date.....03/10/11
EMERGENCY PHONE NUMBER: 1-800-424-9300

WAXIE CLEANSER

=====
SECTION 1 PRODUCT IDENTIFICATION
=====

PRODUCT NAME OR NUMBER..... WAXIE CLEANSER
TRADE NAME OR CHEMICAL NAME..... WAXIE CLEANSER
SYNONYMS..... N/A
FORMULA..... PROPRIETARY
CHEMICAL FAMILY..... CLEANSER
MOLECULAR WEIGHT..... N/A
NFPA..... SEE SECTION 8
HMIS RATING..... SEE SECTION 8

=====
SECTION 2 HAZARDOUS INGREDIENTS / HAZARD DATA
=====

<u>CHEMICAL NAME(S)</u>	<u>CAS NUMBER</u>	<u>% WT</u>	<u>TLV-ACGIH</u>	<u>PBL-OSHA</u>	<u>SEC. 313</u>	<u>NTP</u>	<u>IARC</u>	<u>PROP. 65</u>
SODIUM DICHLORO-S-TRIAZINETRIO	002893-78-9	<1.0	NONE	NONE	No	NO	NO	No

=====
SECTION 3 REGULATORY DATA
=====

NTP..... NATIONAL TOXICOLOGY PROGRAM
IARC..... INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
PROPOSITION 65..... THIS PRODUCT CONTAINS INGREDIENTS ON
THE LIST OF PROPOSITION 65.
STATE OF CALIFORNIA SAFE DRINKING WATER AND
TOXIC ENFORCEMENT ACT OF 1986.
SECTION 313 SARA TITLE III... THE CHEMICAL(S) MARKED WITH A "YES" ON
SECTION 313 ARE SUBJECT TO THE REPORTING
REQUIREMENTS OF THIS SECTION.

=====
SECTION 4 PHYSICAL DATA
=====

BOILING/MELTING POINT @760 mm Hg N/A
pH..... 11.0 OF A 10% SOLUTION
SPECIFIC GRAVITY OR BULK DENSITY 2.65
SOLUBILITY IN WATER..... N/A
APPEARANCE..... WHITE CRYSTALLINE POWDER
ODOR..... NONE

=====
SECTION 5 FIRE AND EXPLOSION HAZARD DATA
=====

FLASH POINT °F (Test Method).... NON-FLAMMABLE
AUTOIGNITION TEMPERATURE..... N/A
FLAMMABILITY LIMITS IN AIR (% V) NOT DETERMINED
EXTINGUISHING MEDIA..... WATER, CARBON DIOXIDE, FOAM, DRY CHEMICAL.
SPECIAL FIRE FIGHTING PROCEDURES WEAR SELF CONTAINED BREATHING APPARATUS
AND FULL PROTECTIVE EQUIPMENT.
UNUSUAL FIRE & EXPLOSION HAZARDS EXTINGUISH ALL NEARBY SOURCES OF IGNITION.

WAXIE CLEANSER

=====
SECTION 6 HEALTH HAZARD DATA * EFFECTS OF OVEREXPOSURE
=====

THRESHOLD LIMIT VALUE.....SEE SECTION 2

SIGN AND SYMPTOMS OF EXPOSURE

EYES.....DIRECT CONTACT WITH CONCENTRATED PRODUCT MAY CAUSE MODERATE IRRITATION AND TEARING.
SKIN.....REPEATED OR PROLONGED CONTACT MAY CAUSE IRRITATION OR DRYING.
INHALATION.....BREATHING DUST OR MIST MAY IRRITATE THE NOSE AND THROAT.
INGESTION.....SWALLOWING LARGE QUANTITIES MAY CAUSE NAUSEA, VOMITING, DIARRHEA AND ABDOMINAL PAIN.
CHRONIC OVEREXPOSURE.....NONE KNOWN

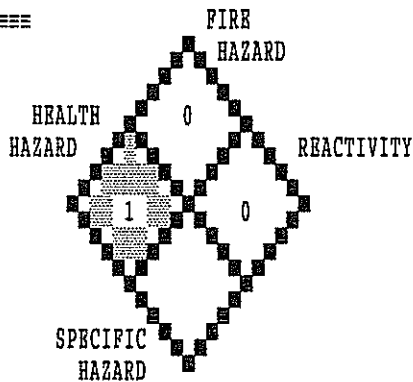
=====
SECTION 7 EMERGENCY AND FIRST AID PROCEDURES
=====

INHALATION.....MOVE SUBJECT TO FRESH AIR. IF BREATHING IS DIFFICULT, OBTAIN MEDICAL HELP.
EYES.....FLUSH EYES WITH A LARGE AMOUNT OF WATER FOR AT LEAST 15 MINUTES. CONSULT A PHYSICIAN IF IRRITATION PERSISTS.
SKIN.....WASH AFFECTED SKIN AREAS WITH WATER. CONSULT PHYSICIAN IF IRRITATION PERSISTS.
INGESTION.....NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. DO NOT INDUCE VOMITING. GIVE LARGE QUANTITIES OF WATER. GET MEDICAL ATTENTION IMMEDIATELY.

=====
SECTION 8 HMS RATING SYSTEM
=====

NFPA

====



HMS RATING

=====

HEALTH HAZARD.....:1
FIRE HAZARD.....:0
REACTIVITY.....:0
PERSONAL PROTECTION...:SEE SECTION 10

=====
SECTION 9 REACTIVITY DATA
=====

PRODUCT STABILITY..... STABLE
 Conditions to Avoid.....
CHEMICAL INCOMPATIBILITY..... DO NOT MIX WITH OTHER PRODUCTS, ESPECIALLY TOILET BOWL CLEANERS OR PRODUCTS THAT CONTAIN AMMONIA.
HAZARDOUS DECOMPOSITION PRODUCTS PHOSPHOROUS OXIDES FROM TEMPERATURES ABOVE 400°F.
HAZARDOUS POLYMERIZATION..... WILL NOT OCCUR
 Conditions to Avoid..... NONE KNOWN
CORROSIVE TO METAL..... NO
OXIDIZER..... NO

=====
SECTION 10 SPECIAL PROTECTION INFORMATION
=====

RESPIRATORY PROTECTION.....NOT NEEDED

VENTILATION:

MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174

IDENTITY AND DISTRIBUTOR'S INFORMATION						
NFPA Rating: Health-2; Flammability-3; Reactivity-0; Special--			HMIS Rating: Health-2; Flammability-3; Reactivity-0; Personal Protection-B			
Manufactured For: WAXIE Enterprises, Inc. Address: P.O. Box 23506 Address: San Diego, CA 92193-3506			DOT Hazard Classification: ORM-D Identity (trade name as used on label): <b style="text-align: center;">Waxie Hospital Spray Surface Disinfectant			
Phone: 1-800-995-4466			MSDS Number: 223 Revision- 10			
Emergency Response Number: 1-800-255-3924			Date Prepared: 10/05/00 Prepared By: DL/IB			
NOTICE: JUDGMENT BASED ON INDIRECT TEST DATA						
SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION						
COMPONENTS-CHEMICAL NAMES AND COMMON NAMES (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)		CAS Number	SARA III LIST	OSHA PEL (ppm)	ACGIH TLV (ppm)	Carcinogen Ref. Source **
ETHANOL		64-17-5	No	1000	1000	d
SODIUM NITRITE		7632-00-0	No	N/E	N/E	d
AMMONIUM HYDROXIDE		1336-21-6	No	35	25	d
ISOBUTANE / PROPANE BLEND		75-28-5	No	800	800	d
		74-98-6	No	1000	1000	d
METHANOL		67-56-1	Yes	200	200	d
O-PHENYLPHENOL		90-43-7	Yes	NE	NE	e
WARNING: This product contains a chemical or chemicals known to the State of California to cause cancer.						
SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS						
Boiling Point: N/A			Specific Gravity (H2O=1): Concentrate Only = 0.880			
Vapor Pressure: PSIG @ 70°F (Aerosols): Max.60			Vapor Pressure (Non-Aerosols)(mm Hg and Temperature): N/A			
Vapor Density (Air = 1): N/E			Evaporation Rate (= 1): N/E			
Solubility in Water: Soluble			Water Reactive: No			
Appearance and Odor: Clear, colorless spray, light airy fragrance.						
SECTION 3 - FIRE AND EXPLOSION HAZARD DATA						
FLAMMABILITY as per USA FLAME PROJECTION TEST (aerosols) NON-FLAMMABLE		Auto Ignition Temperature N/E		Flammability Limits in Air by % in Volume: % LEL: N/E % UEL: N/E		
FLASH POINT AND METHOD USED (non-aerosols): N/A			EXTINGUISHER MEDIA: Foam, dry chemical, carbon dioxide, water.			
SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus.						
Unusual Fire & Explosion Hazards: Do not expose aerosols to temperatures above 130°F or the container may rupture.						
SECTION 4 - REACTIVITY HAZARD DATA						
STABILITY [X] STABLE [] UNSTABLE			HAZARDOUS POLYMERIZATION [] WILL [X] WILL NOT OCCUR			
Incompatibility (Mat. to avoid): Oxidants, reducing agents, ammonium salts.			Conditions to Avoid: Open flame, welding arcs, heat, sparks.			
Hazardous Decomposition Products: CO, CO2.						
SECTION 5 - HEALTH HAZARD DATA						
PRIMARY ROUTES OF ENTRY: [X] INHALATION [] INGESTION [] SKIN ABSORPTION [] EYE [] NOT HAZARDOUS						
ACUTE EFFECTS						
Inhalation: Excessive inhalation of vapors can be harmful and may cause headache, dizziness, asphyxia, anesthetic effects and possible unconsciousness.						
Eye Contact: Mild irritation.			Skin Contact: Possible mild irritation.			
Ingestion: Possible chemical pneumonitis if aspirated into lungs. Nausea.						
CHRONIC EFFECTS: (Effects due to excessive exposure to the raw materials of this mixture)						
Overexposure may cause kidney damage, liver abnormalities, brain damage.						
Medical Conditions Generally Aggravated by Exposure: May aggravate existing eye, skin, or upper respiratory conditions.						
EMERGENCY FIRST AID PROCEDURES						
Eye Contact: Flush with water for 15 minutes. If irritated, seek medical attention.						
Skin Contact: Wash with soap and water. If irritated, seek medical attention.						
Inhalation: Remove to fresh air. Resuscitate if necessary. Get medical attention.						
Ingestion: DO NOT INDUCE VOMITING. Drink two large glasses of water. Get immediate medical attention.						
SECTION 6 - CONTROL AND PROTECTIVE MEASURES						
Respiratory Protection (specify type): If vapor concentration exceeds TLV, use respirator approved by NIOSH in positive pressure mode.						
Protective Gloves: Latex, if skin easily irritated.			Eye Protection: Safety glasses recommended.			
Ventilation Requirements: Adequate ventilation to keep vapor concentration below TLV.						
Other Protective Clothing & Equipment: None						
Hygienic Work Practices: Wash with soap and water before handling food. Remove contaminated clothing.						
SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE						
Steps To Be Taken If Material Is Spilled Or Released: Absorb with suitable medium. Incinerate or landfill according to local, state or federal regulations.						
Waste Disposal Methods: Aerosol cans when vented to atmospheric pressure through normal use, pose no disposal hazard.						
Precautions To Be Taken In Handling & Storage: Do not puncture or incinerate containers. Do not store at temperatures above 130°F.						
Other Precautions &/or Special Hazards: KEEP OUT OF REACH OF CHILDREN. Avoid food contamination. Avoid breathing vapors. Remove ignition sources. Do not use on polished wood furniture or rayon fabrics.						

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind.

** Chemical Listed as Carcinogen or Potential Carcinogen. [a] NTP [b] IARC Monograph [c] OSHA [d] Not Listed [e] Animal Data Only



Safety Data Sheet

1 - Chemical Product and Company Identification

Manufacturer: WD-40 Company Address: 9715 Business Park Ave San Diego, CA , USA Post code: 92131 Telephone: +1-800-448-9340 +1-858-251-5600 24 Hour Emergency Phone Number: 1-888-324-7596 (PROSAR) Chemical Spills: 1-800-424-9300 (Chemtrec) 1-703-527-3887 (International Calls)	Chemical Name: Organic Mixture Trade Name: WD-40 Aerosol Product Use: Lubricant, Penetrant, Drives Out Moisture, Removes and Protects Surfaces From Corrosion SDS Date Of Preparation: 12/28/17
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2 – Hazards Identification

GHS Classification:

Flammable Aerosol Category 1

Aspiration Toxicity Category 1

Skin Irritation Category 3

Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)



DANGER!

H222 Extremely flammable aerosol.

H229 Pressurized container: may burst if heated.

H304 May be fatal if swallowed and enters airways.

H316 Causes mild skin irritation.

H336 May cause drowsiness or dizziness.

Prevention

P210 Keep away from heat, sparks, open flames, and hot surfaces. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P261 Avoid breathing mist or vapors.

P271 Use only outdoors or in a well-ventilated area.

Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P331 Do NOT induce vomiting.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER or doctor if you feel unwell.

P332+P313 If skin irritation occurs: Get medical attention.

Storage

P405 Store locked up.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

P501 Dispose of contents and container in accordance with local and national regulations.

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent	GHS Classification
Aliphatic Hydrocarbon	64742-47-8	50-70%	Flammable Liquid Category 3 Aspiration Toxicity Category 1 Skin Irritation Category 3 Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)
Petroleum Base Oil	64742-56-9 64742-65-0 64742-53-6 64742-54-7 64742-71-8	<25%	Not Hazardous
Non-Hazardous Ingredients	Mixture	<10%	Not Hazardous
Carbon Dioxide	124-38-9	2-3%	Gas Under Pressure: Compressed Gas

4 – First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.

Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

Most Important Symptoms (acute and delayed): Harmful or fatal if swallowed. If swallowed, may be aspirated and cause lung damage. Prolonged skin contact may cause drying of the skin. Inhalation of mists or vapors may cause nasal and respiratory tract irritation and central nervous system effects such as headache, dizziness and nausea.

Indication of Immediate Medical Attention or Special Treatment: Immediate medical attention is required for ingestion.

5 – Fire Fighting Measures

Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

Special Fire Fighting Procedures: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

Unusual Fire and Explosion Hazards: Contents under pressure. Extremely flammable aerosol. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors can cause a flash fire. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. A vapor and air mixture can create an explosion hazard in confined spaces.

6 – Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Eliminate all sources of ignition and ventilate area. Wear appropriate protective clothing (see Section 8).

Environmental Precautions: Report spills to authorities as required.

Methods and Materials for Containment/Cleanup: Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces

and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

Conditions for Safe Storage, including any incompatibilities: Store in a cool, well-ventilated area, away from incompatible materials. Do not store in direct sunlight or above 120°F. U.F.C (NFPA 30B) Level 3 Aerosol. Store away from oxidizers.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
Aliphatic Hydrocarbon	1200 mg/m ³ TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m ³ TWA (inhalable) ACGIH TLV (as mineral oil) 5 mg/m ³ TWA OSHA PEL (as oil mist, mineral)
Non-Hazardous Ingredients	None Established
Carbon Dioxide	5000 ppm TWA, 30,000 ppm STEL ACGIH TLV 5000 ppm TWA OSHA PEL

The Following Controls are Recommended for Normal Consumer Use of this Product

Engineering Controls: Use in a well-ventilated area.

Personal Protection:

Eye Protection: Avoid eye contact. Always spray away from your face.

Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended

Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

Personal Protection:

Eye Protection: Safety goggles recommended where eye contact is possible.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

Appearance:	Light amber liquid	Flammable Limits:	LEL: 0.7% UEL: 5.6% (Aliphatic Hydrocarbon)
Odor:	Mild petroleum odor	Vapor Pressure:	Not established
Odor Threshold:	Not established	Vapor Density:	Greater than 1 (air=1)
pH:	Not established	Relative Density:	Not established
Melting/Freezing Point:	Not established	Solubilities:	Insoluble in water
Boiling Point/Range:	320-388°F (160-198°C) (Aliphatic Hydrocarbon)	Partition Coefficient; n-octanol/water:	Not established
Flash Point:	109°F (43°C) (Aliphatic Hydrocarbon)	Autoignition Temperature:	Not established
Evaporation Rate:	Not established	Decomposition Temperature:	Not established
Flammability (solid, gas):	Flammable Aerosol	Viscosity:	Not established
VOC:	533 grams/liter (65%)	Pour Point:	Not established

10 – Stability and Reactivity

Reactivity: Non-reactive

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate containers.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide, smoke fumes, unburned hydrocarbons.

11 – Toxicological Information

Symptoms of Overexposure:

Inhalation: Mist or vapors can irritate the throat and lungs. High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.

Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.

Eye Contact: Contact may be irritating to eyes. May cause redness, stinging, swelling and tearing.

Ingestion: This product has low oral toxicity. If swallowed, this material may cause irritation of the mouth, throat and esophagus. Swallowing may cause gastrointestinal irritation, nausea, vomiting, diarrhea, dizziness, drowsiness and other central nervous system effects. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.

Chronic Effects: None expected.

Medical Conditions Aggravated by Exposure: Preexisting eye, skin and respiratory conditions may be aggravated by exposure.

Suspected Cancer Agent:

Yes No X

Numerical Measures of Toxicity:

Acute Toxicity Estimates: Oral > 5,000 mg/kg; Dermal >2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

12 – Ecological Information

Ecotoxicity: No specific aquatic toxicity data is currently available; however components of this product are not expected to be harmful to aquatic organisms

Persistence and Degradability: Components are expected to be readily biodegradable.

Bioaccumulative Potential: Bioaccumulation is not expected based on an assessment of the ingredients.

Mobility in Soil: No data available.

Other Adverse Effects: None Known

13 - Disposal Considerations

Aerosol containers should not be punctured, compacted in home trash compactors or incinerated. Empty containers may be disposed of through normal waste management options. Dispose of all waste product, absorbents, and other materials in accordance with applicable Federal, state and local regulations.

14 – Transportation Information

DOT Surface Shipping Description: UN1950, Aerosols, 2.1 Ltd. Qty

(Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)

IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY

ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1

NOTE: WD-40 Company does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

15 – Regulatory Information

U.S. Federal Regulations:

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category For Section 311/312: See OSHA Hazard Classification in Section 2.

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

International Information:

China Regulations on the Control over Safety of Dangerous Chemicals: All ingredients in this product are listed on the IECSC (Inventory of Existing Chemical Substances in China 2010).

Korea: All of the components of this product are listed on the Korean chemical inventory.

Philippines: This product contains an ingredient that is not listed on the PICCS. Only limited volumes can be imported. Contact WD40 for more information.

Japan: All of the components of this product are listed on the Japanese chemical inventory.

Taiwan: All the components of this product are listed on the Taiwan Inventory.

16 – Other Information

HMIS Hazard Rating:

Health – 2 (moderate hazard), Fire Hazard – 4 (severe hazard), Physical Hazard – 0 (minimal hazard)

Revision Date: December 2017

Supersedes: November 2015

Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA

2021300/No.

MATERIAL SAFETY DATA SHEET
ZOECON ALTOSID® BRIQUETS

Manufacturer: Wellmark International
Address: 1501 E. Woodfield Rd., Suite 200 West, Schaumburg, IL 60173
Emergency Phone: 1-800-248-7763
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Zoecon Altosid® Briquets
Chemical Name/Synonym: S)-Methoprene: Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate
Chemical Family: Terpenoid
Formula: C₁₉ H₃₄ O₃
EPA Registration No.: 2724-375-
RF Number: 433A

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component (chemical, common name)</u>	<u>CAS Number</u>	<u>Weight</u>	<u>Tolerance</u>
(S)-Methoprene: Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate	65733-16-6	8.62%	Not established
Inert ingredients (non-hazardous and/or trade secret):		91.38%	

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT
Caution: Keep out of the reach of children..

SIGNS AND SYMPTOMS OF OVEREXPOSURE

No adverse reactions have resulted from normal human exposure during research and testing. Adverse animal reactions to this product have not been shown.

PRIMARY ROUTE OF ENTRY Dermal/Eye: Yes Oral: Yes **Inhalation:** Yes

ACUTE TOXICITY

Oral: LD50 (rat): > 34,600 mg/kg bw (highest dose level tested) (Based on S-Methoprene)

Dermal: LD50 (rabbit) >5,000 mg/kg bw (Based on S-Methoprene)

Inhalation: LC50 (rat): >5.19 mg/L air (Based on S-Methoprene)

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Non-irritating (rabbit) (Based on S-Methoprene)
Eye Irritation: Practically non-irritating (rabbit) (Based on S-Methoprene)
Sensitizer: Not a sensitizer(guinea pig) (Based on S-Methoprene)

4. FIRST AID MEASURES

- Eye:** Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.
- Skin:** Wash material off with soap and water. Remove contaminated clothing and footwear. See a physician if symptoms persist.
- Ingestion:** Drink 1-2 glasses of water and try to induce vomiting. Seek medical attention. Never give anything by mouth to an unconscious person.
- Inhalation:** Remove victim to fresh air. See a physician if cough or other respiratory symptoms develop
- Note to Physician:** Treat symptomatically

5. FIRE FIGHTING MEASURES

- NFPA Rating:** **Health: 0** **Fire: 0** **Reactivity: 0**
- Flammability Class:** N/A
- Flash Point:** Does not flash
- Explosive Limits (% of Volume):** N/A
- Extinguishing Media:** Water, foam, dry chemical
- Special Protective Equipment:** Firefighters should wear protective clothing, eye protection, and self contained breathing apparatus.
- Fire Fighting Procedures:** Normal procedures. Do not allow run-off to enter waterways inhabited by aquatic organisms
- Combustion Products:** Carbon dioxide, carbon monoxide
- Unusual Fire/Explosion Hazards:** None

6. ACCIDENTAL RELEASE MEASURES

- Steps to be taken:** Sweep up material and place in a container for disposal. Do not allow spill to enter waterways inhabited by aquatic organisms
- Absorbents:** None necessary due to product form
- Incompatibles:** None

7. HANDLING AND STORAGE

- Handling:** Avoid contact with eyes or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling.
- Storage:** Store in a cool, dry place. Do not contaminate food or feed by storage or disposal. Keep away from children.

8. EXPOSURE CONTROL / PERSONAL MEASURES

- Exposure Limits:** Not applicable
- Ventilation:** Use with adequate ventilation.
- Personal Protective Equipment:** Under ordinary use conditions, no special protection is required. If prolonged exposure is expected, it is recommended to wear a MSHA/NIOSH approved organic vapor/pesticide respirator, impervious gloves, chemical goggles or safety glasses with side shields.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Grey to black solid with slight hydrocarbon odor.
Boiling Point:	N/A
Melting Point:	N/A
Vapor Pressure (mm Hg):	N/A
Vapor Density (Air = 1):	N/A
Specific Gravity:	1.4 g/cc
Bulk Density:	N/A
Solubility:	1 ppm
Evaporation Rate:	N/A
pH:	N/A

10. STABILITY AND REACTIVITY

Stability:	Stable
Reactivity:	Non-reactive
Incompatibility w/ Other Materials:	None
Decomposition Products:	None
Hazardous Polymerization:	Will not occur

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Based on (RS)-Methoprene Technical]

Methoprene is not considered as a carcinogen. The NOEL for non-carcinogen effects in an 18-month mouse study was 250ppm.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Based on (RS)-Methoprene Technical]

Methoprene is not a teratogen. The NOEL for maternal and embryo toxicity in rabbits was 200 mg/kg/day. The NOEL for reproductive effects in rats was 500 ppm.

MUTAGENICITY [Based on (RS)-Methoprene Technical]

Methoprene is not a mutagen.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Based on (RS)-Methoprene Technical]

Hydrolysis:	T1/2 > 4 weeks
Photolysis:	T1/2 < 10 hours
Soil half life:	~ 10 days
Water solubility:	< 2 ppm

ECOTOXICITY [Based on (S)-Methoprene Technical]

Acute Toxicity: fish:LC50 (trout): 760 ppb, (bluegill): > 370 ppb ((S)-Methoprene); **aquatic invertebrates:**LC50 (Daphnia): 360 ppb ((S)-Methoprene.)

13. DISPOSAL CONSIDERATIONS

Wastes resulting from the use of this product may be disposed of on site or at an approved waste management facility. Triple rinse (or equivalent). Do not contaminate water when disposing of rinsate or equipment wash waters. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

DOT49CFR Description: Not regulated as hazardous by D.O.T.

Freight Classification: Insecticides, NOI other than poison in boxes or drums. NMFC 102120

15. REGULATORY INFORMATION

CERCLA (Superfund): Not regulated

RCRA: Not regulated as hazardous

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes (irritation)

Delayed Health: No

Fire: No

Sudden Pressure: No

Reactivity: No

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.