303 Fabric Guard

Trico Products

Chemwatch: **5281-72** Version No: **2.1.1.1**

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: 11/30/2017 Print Date: 12/08/2017 L.GHS.AUS.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	303 Fabric Guard	
Synonyms	Pack Size:, 473ml Bottle (PN: 30616M, 30605), 946ml Bottle (PN: 30606), 3.78L Bottle (PN: 30607), 59ml Bottle (PN: 30601)	
Proper shipping name	FLAMMABLE LIQUID, N.O.S. (contains n-butyl acetate and mineral spirit)	
Other means of identification	ans of identification Not Available	

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Use according to manufacturer's directions.
Relevant Identified uses	Product is used on recommended materials to create water repellency.

Details of the supplier of the safety data sheet

Registered company name	Trico Products	
Address	Unit 1, 80 Fairbank Road Clayton VIC 3169 Australia	
Telephone	61 3 9271 3288	
Fax	+61 3 9271 3290	
Website	https://www.tricoproducts.com	
Email	sales@tricoproducts.com.au	

Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	+61 3 9271 3288
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

	Min	Max	
Flammability	2		
Toxicity	2		0 = Minimum
Body Contact	2		1 = Low 2 = Moderate
Reactivity	1		3 = High
Chronic	0		4 = Extreme

Poisons Schedule	Florenchia Limit Cotegory 2 Acute Truicity (Crel) Cotegory 4 Considerators of projective single property Cotegory 2 (acutetic effects). Assistators	
Classification ^[1]		
Legend: 1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI		

Label elements

Hazard pictogram(s)







SIGNAL WORD DANGER

Hazard statement(s)

H226	Flammable liquid and vapour.	
H302	Harmful if swallowed.	
H336	May cause drowsiness or dizziness.	

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H304	May be fatal if swallowed and enters airways.	
H412 Harmful to aquatic life with long lasting effects.		
Precautionary statement(s) Prevention		
P210	P210 Keep away from heat/sparks/open flames/hot surfaces No smoking.	
P271	Use only outdoors or in a well-ventilated area.	

P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.	
P271	Use only outdoors or in a well-ventilated area.	
P240	Ground/bond container and receiving equipment.	
P241	Jse explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.	
P242	Use only non-sparking tools.	
P243	Take precautionary measures against static discharge.	
P261	Avoid breathing mist/vapours/spray.	
P270	Do not eat, drink or smoke when using this product.	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eve protection/face protection	

Precautionary statement(s) Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.	
P331	Do NOT induce vomiting.	
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.	
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.	
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.	
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.	
P330	Rinse mouth.	

Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.	
P405	Store locked up.	

Precautionary statement(s) Disposal

P501 Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
64742-47-8.	0-92	isoparaffins petroleum hydrotreated HFP
64475-85-0	0-5	mineral spirit
123-86-4	0-2.4	n-butyl acetate
64742-88-7	<2	solvent naphtha petroleum, medium aliphatic.
Not Available	0-1.6	fluorinated acrylic copolymer, proprietary

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Description of first aid measi	ures
Eye Contact	If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If furnes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.

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If swallowed do NOT induce vomiting
 If vomiting occurs, lean patient forwar

- ▶ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- ▶ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- ▶ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink
- Seek medical advice.

Ingestion

- ▶ Avoid giving milk or oils.
- Avoid giving alcohol.
- If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

Indication of any immediate medical attention and special treatment needed

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

- ▶ Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or
 poor arterial blood gases (pO2 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- Lavage is indicated in patients who require decontamination, ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- Foam
- Dry chemical powder.
- ▶ BCF (where regulations permit)
- Carbon dioxide
- Water spray or fog Large fires only.

Special hazards arising from the substrate or mixture

Fire Incompatibility	► Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
Advice for firefighters	
Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.
Fire/Explosion Hazard	 Liquid and vapour are flammable. Moderate fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air. Moderate explosion hazard when exposed to heat or flame. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon dioxide (CO2)

SECTION 6 ACCIDENTAL RELEASE MEASURES

HAZCHEM

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills

Remove all ignition sources.

- Clean up all spills immediately.
- ► Avoid breathing vapours and contact with skin and eyes.

other pyrolysis products typical of burning organic material.

- ► Control personal contact with the substance, by using protective equipment.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- Wipe up.

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 Collect residues in a flammable waste container. ▶ Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. ► May be violently or explosively reactive. $\,\blacktriangleright\,$ Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Consider evacuation (or protect in place). ▶ No smoking, naked lights or ignition sources. Increase ventilation. **Major Spills** Stop leak if safe to do so. Water spray or fog may be used to disperse /absorb vapour. Contain spill with sand, earth or vermiculite. Use only spark-free shovels and explosion proof equipment. ► Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. ▶ If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

	► Containers, even those that have been emptied, may contain explosive vapours.
	▶ Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
	▶ Avoid all personal contact, including inhalation.
	▶ Wear protective clothing when risk of overexposure occurs.
	▶ Use in a well-ventilated area.
	▶ Prevent concentration in hollows and sumps.
	► DO NOT enter confined spaces until atmosphere has been checked.
	▶ Avoid smoking, naked lights or ignition sources.
	► Avoid generation of static electricity.
	► DO NOT use plastic buckets.
Safe handling	▶ Earth all lines and equipment.
	▶ Use spark-free tools when handling.
	► Avoid contact with incompatible materials.
	▶ When handling, DO NOT eat, drink or smoke.
	▶ Keep containers securely sealed when not in use.
	▶ Avoid physical damage to containers.
	▶ Always wash hands with soap and water after handling.
	▶ Work clothes should be laundered separately.
	▶ Use good occupational work practice.
	▶ Observe manufacturer's storage and handling recommendations contained within this SDS.
	 Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.
	► Store in original containers in approved flammable liquid storage area.
	▶ Store away from incompatible materials in a cool, dry, well-ventilated area.
	► DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
	▶ No smoking, naked lights, heat or ignition sources.
	▶ Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel - adequate
	security must be provided so that unauthorised personnel do not have access.
	▶ Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantitie
	and minimum storage distances.
	► Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical systems.
Other information	▶ Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers - dry chemical, foam or carbon dioxide) and flammable gas
	detectors.
	▶ Keep adsorbents for leaks and spills readily available.
	▶ Protect containers against physical damage and check regularly for leaks.
	 Observe manufacturer's storage and handling recommendations contained within this SDS.
	In addition, for tank storages (where appropriate):
	▶ Store in grounded, properly designed and approved vessels and away from incompatible materials.
	For bulk storages, consider use of floating roof or nitrogen blanketed vessels; where venting to atmosphere is possible, equip storage tank vents with
	flame arrestors; inspect tank vents during winter conditions for vapour/ ice build-up.
	▶ Storage tanks should be above ground and diked to hold entire contents.

- ▶ Packing as supplied by manufacturer. Plastic containers may only be used if approved for flammable liquid. ► Check that containers are clearly labelled and free from leaks. For low viscosity materials (i): Drums and jerry cans must be of the non-removable head type. (ii): Where a can is to be used as an inner package, the can must have a screwed enclosure. ▶ For materials with a viscosity of at least 2680 cSt. (23 deg. C) Suitable container ► For manufactured product having a viscosity of at least 250 cSt. (23 deg. C) Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25 deg. C): (i) Removable head packaging; (ii) Cans
 - with friction closures and (iii) low pressure tubes and cartridges may be used.
 - Where combination packages are used, and the inner packages are of glass, there must be sufficient inert cushioning material in contact with inner and outer packages
 - In addition, where inner packagings are glass and contain liquids of packing group I there must be sufficient inert absorbent to absorb any spillage, unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic.

Storage incompatibility

- ▶ Avoid reaction with oxidising agents
- Avoid strong acids, bases.

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Must not be stored together

May be stored together with specific preventions

May be stored together

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	isoparaffins petroleum hydrotreated HFP	White spirits	790 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	n-butyl acetate	n-Butyl acetate	713 mg/m3 / 150 ppm	950 mg/m3 / 200 ppm	Not Available	Not Available
Australia Exposure Standards	solvent naphtha petroleum, medium aliphatic.	Oil mist, refined mineral	5 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
isoparaffins petroleum hydrotreated HFP	Stoddard solvent; (Mineral spirits, 85% nonane and 15% trimethyl benzene)	300 mg/m3	1,800 mg/m3	29500 mg/m3
n-butyl acetate	Butyl acetate, n-	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
isoparaffins petroleum hydrotreated HFP	20,000 mg/m3	Not Available
mineral spirit	Not Available	Not Available
n-butyl acetate	1,700 [LEL] ppm	Not Available
solvent naphtha petroleum, medium aliphatic.	2,500 mg/m3	Not Available
fluorinated acrylic copolymer, proprietary	Not Available	Not Available

MATERIAL DATA

NOTE M: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 0.005% w/w benzo[a]pyrene (EINECS No 200-028-5). This note applies only to certain complex oil-derived substances in Annex IV.

European Union (EU) List of harmonised classification and labelling hazardous substances, Table 3.1, Annex VI, Regulation (EC) No 1272/2008 (CLP) - up to the latest ATP

NOTE P: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 0.01% w/w benzene (EINECS No 200-753-7). Note E shall also apply when the substance is classified as a carcinogen. This note applies only to certain complex oil-derived substances in Annex VI.

European Union (EU) List of harmonised classification and labelling hazardous substances, Table 3.1, Annex VI, Regulation (EC) No 1272/2008 (CLP) - up to the latest ATP

Exposure controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Employers may need to use multiple types of controls to prevent employee overexposure.

For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant.

Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Appropriate engineering controls

Type of Contaminant:	Air Speed:
solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min.)
aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)

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Within each range the appropriate value depends on: Lower end of the range Upper end of the range 1: Room air currents minimal or favourable to capture 1: Disturbing room air currents 2: Contaminants of low toxicity or of nuisance value only. 2: Contaminants of high toxicity 3: Intermittent, low production. 3: High production, heavy use 4: Large hood or large air mass in motion 4: Small hood-local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

Personal protection









Eye and face protection

Safety glasses with side shields

Chemical goggles

Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

Skin protection

See Hand protection below

- Wear chemical protective gloves, e.g. PVC.
- ▶ Wear safety footwear or safety gumboots, e.g. Rubber

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

- frequency and duration of contact.
- chemical resistance of glove material,
- glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374. AS/NZS 2161.10.1 or national equivalent) is recommended.
- Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.
- Contaminated gloves should be replaced.

For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.

It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.

Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Polvethylene gloves

Body protection

Hands/feet protection

See Other protection below

- Overalls. PVC Apron.
- PVC protective suit may be required if exposure severe.
- ► Eyewash unit.
- ▶ Ensure there is ready access to a safety shower.

Other protection

- Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.
- For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).
- Non sparking safety or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot an shall dissipate static electricity from the body to reduce the possibility of ignition of volatile compounds. Electrical resistance must range between 0 to 500,000 ohms. Conductive shoes should be stored in lockers close to the room in which they are worn. Personnel who have been issued conductive footwear should not wear them from their place of work to their homes and return.

Thermal hazards

Not Available

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Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the $\ensuremath{\textit{computer-}}$ generated selection:

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Material	СРІ
BUTYL	С
BUTYL/NEOPRENE	С
HYPALON	С
NATURAL RUBBER	С
NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
NITRILE+PVC	С
PE	С
PE/EVAL/PE	С
PVA	С
PVC	С
TEFLON	С
VITON/BUTYL	С

^{*} CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted. or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A-AUS	-	A-PAPR-AUS / Class 1
up to 50 x ES	-	A-AUS / Class 1	-
up to 100 x ES	-	A-2	A-PAPR-2 ^

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear flammable liquid with a banana fragrance, door not	mic with water				
Appearance Clear flammable liquid with a banana fragrance; does not mix with water.						
Physical state	Liquid	Relative density (Water = 1)	0.85			
Odour	Not Available	Partition coefficient n-octanol / water	Not Available			
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available			
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available			
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	3			
Initial boiling point and boiling range (°C)	>150	Molecular weight (g/mol)	Not Applicable			
Flash point (°C)	50 (CC)	Taste	Not Available			
Evaporation rate	<0.1 BuAC = 1	Explosive properties	Not Available			
Flammability	Flammable.	Oxidising properties	Not Available			
Upper Explosive Limit (%)	5.5	Surface Tension (dyn/cm or mN/m)	Not Available			
Lower Explosive Limit (%)	0.6	Volatile Component (%vol)	100			
Vapour pressure (kPa)	0.1	Gas group	Not Available			
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Applicable			
Vapour density (Air = 1)	5.3	VOC g/L	Not Available			

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

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SECTION 11 TOXICOLOGICAL INFORMATION

Information	On '	toxico	Ionical	effects	

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.

Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an

inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system.

Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.

Ingestion

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

Swallowing of the liquid may cause aspiration of vomit into the lungs with the risk of haemorrhaging, pulmonary oedema, progressing to chemical pneumonitis; serious consequences may result.

Signs and symptoms of chemical (aspiration) pneumonitis may include coughing, gasping, choking, burning of the mouth, difficult breathing, and bluish coloured skin (cyanosis).

Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.

Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.

Open cuts, abraded or irritated skin should not be exposed to this material

The material may accentuate any pre-existing dermatitis condition

Skin Contact

Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

Eye

Limited evidence exists, or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals and/or is expected to produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.

Chronic

On the basis, primarily, of animal experiments, concern has been expressed by at least one classification body that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment. Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.

Repeated or prolonged exposure to mixed hydrocarbons may produce narcosis with dizziness, weakness, irritability, concentration and/or memory loss, tremor in the fingers and tongue, vertigo, olfactory disorders, constriction of visual field, paraesthesias of the extremities, weight loss and anaemia and degenerative changes in the liver and kidney. Chronic exposure by petroleum workers, to the lighter hydrocarbons, has been associated with visual disturbances, damage to the central nervous system, peripheral neuropathies (including numbness and paraesthesias), psychological and neurophysiological deficits, bone marrow toxicities (including hypoplasia possibly due to benzene) and hepatic and renal involvement. Chronic dermal exposure to petroleum hydrocarbons may result in defatting which produces localised dermatoses. Surface cracking and erosion may also increase susceptibility to infection by microorganisms. One epidemiological study of petroleum refinery workers has reported elevations in standard mortality ratios for skin cancer along with a dose-response relationship indicating an association between routine workplace exposure to petroleum or one of its constituents and skin cancer, particularly melanoma. Other studies have been unable to confirm this finding.

IRRITATION

Not Available

Repeated application of mildly hydrotreated oils (principally paraffinic), to mouse skin, induced skin tumours; no tumours were induced with severely hydrotreated oils.

Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]

isoparaffins petroleum hydrotreated HFP	
.,	

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TOXICITY	IRRITATION
Not Available	Not Available

Dermal (rabbit) LD50: >1900 mg/kg^[1]

Dermal (rabbit) LD50: >2000 mg/kg^[1]

Inhalation (rat) LC50: >2796.8052 mg/l/8H^[2]

Oral (rat) LD50: >4500 mg/kg^[1]

Oral (rat) LD50: $>5000 \text{ mg/kg}^{[1]}$

TOXICITY

mineral spirit

TOXICITY IRRITATION Dermal (rabbit) LD50: 15400 mg/kg^[2] Not Available

Inhalation (rat) LC50: >21.4 mg/l/4h^[2]
Oral (rat) LD50: >34600 mg/kg^[2]

Oral (rat) LD50: 10768 mg/kg^[2]

n-butyl acetate

TOXICITY	IRRITATION
Dermal (rabbit) LD50: 3200 mg/kg ^[2]	Eye (human): 300 mg
Inhalation (rat) LC50: 1.802 mg/l4 h ^[1]	Eye (rabbit): 20 mg (open)-SEVERE

solvent naphtha petroleum, medium aliphatic.

TOXICITY	IRRITATION
dermal (rat) LD50: 28000 mg/kg ^[2]	Not Available

Eye (rabbit): 20 mg/24h - moderate Skin (rabbit): 500 mg/24h-moderate Chemwatch: **5281-72** Page **9** of **12** Issue Date: **11/80/2017**Version No: **2.1.1.1** Print Date: **12/08/2017**

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Oral (rat) LD50: >5000 mg/kg^[1] 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified Legend: data extracted from RTECS - Register of Toxic Effect of chemical Substances ISOPARAFFINS PETROLEUM No significant acute toxicological data identified in literature search. HYDROTREATED HEP The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce N-BUTYL ACETATE The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis. for petroleum: This product contains benzene which is known to cause acute myeloid leukaemia and n-hexane which has been shown to metabolize to compounds which are neuropathic This product contains toluene. There are indications from animal studies that prolonged exposure to high concentrations of toluene may lead to hearing loss This product contains ethyl benzene and naphthalene from which there is evidence of tumours in rodents Carcinogenicity: Inhalation exposure to mice causes liver tumours, which are not considered relevant to humans. Inhalation exposure to rats causes kidney tumours which are not considered relevant to humans. Mutagenicity: There is a large database of mutagenicity studies on gasoline and gasoline blending streams, which use a wide variety of endpoints and give predominantly negative results. All in vivo studies in animals and recent studies in exposed humans (e.g. petrol service station attendants) have shown negative results in mutagenicity assays. Reproductive Toxicity: Repeated exposure of pregnant rats to high concentrations of toluene (around or exceeding 1000 ppm) can cause developmental SOLVENT NAPHTHA effects, such as lower birth weight and developmental neurotoxicity, on the foetus. However, in a two-generation reproductive study in rats exposed to PETROLEUM, MEDIUM gasoline vapour condensate, no adverse effects on the foetus were observed. ALIPHATIC. Human Effects: Prolonged/ repeated contact may cause defatting of the skin which can lead to dermatitis and may make the skin more susceptible to irritation and penetration by other materials. Lifetime exposure of rodents to gasoline produces carcinogenicity although the relevance to humans has been questioned. Gasoline induces kidney cancer in male rats as a consequence of accumulation of the alpha2-microglobulin protein in hyaline droplets in the male (but not female) rat kidney. Such abnormal accumulation represents lysosomal overload and leads to chronic renal tubular cell degeneration, accumulation of cell debris, mineralisation of renal medullary tubules and necrosis. A sustained regenerative proliferation occurs in epithelial cells with subsequent neoplastic transformation with continued exposure. The alpha2-microglobulin is produced under the influence of hormonal controls in male rats but not in females and, more importantly, not in humans. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. for full range naphthas Studies indicate that normal, branched and cyclic paraffins are absorbed from the mammalian gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. With respect to the carbon chain lengths likely to be present in mineral oil, n-paraffins may be absorbed to a greater extent that iso- or cyclo-paraffins. ISOPARAFFINS PETROLEUM The major classes of hydrocarbons have been shown to be well absorbed by the gastrointestinal tract in various species. In many cases, the hydrophobic HYDROTREATED HFP & hydrocarbons are ingested in association with dietary lipids. The dependence of hydrocarbon absorption on concomitant triglyceride digestion and SOLVENT NAPHTHA absorption, is known as the "hydrocarbon continuum hypothesis", and asserts that a series of solubilising phases in the intestinal lumen, created by dietary PETROLEUM, MEDIUM triglycerides and their digestion products, afford hydrocarbons a route to the lipid phase of the intestinal absorptive cell (enterocyte) membrane. While ALIPHATIC. some hydrocarbons may traverse the mucosal epithelium unmetabolised and appear as solutes in lipoprotein particles in intestinal lymph, there is evidence that most hydrocarbons partially separate from nutrient lipids and undergo metabolic transformation in the enterocyte. The enterocyte may play a major role in determining the proportion of an absorbed hydrocarbon that, by escaping initial biotransformation, becomes available for deposition in its unchanged form in peripheral tissues such as adipose tissue, or in the liver.

Acute Toxicity	✓	Carcinogenicity	0
Skin Irritation/Corrosion	0	Reproductivity	0
Serious Eye Damage/Irritation	0	STOT - Single Exposure	✓
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	✓

Legend:

🗶 – Data available but does not fill the criteria for classification

→ Data available to make classification

Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

303 Fabric Guard	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE SO	URCE
	Not Available	Not Available	Not Available	Not No Available Ava	ot railable
isoparaffins petroleum hydrotreated HFP	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE SO	OURCE
	LC50	96	Fish	2.2mg/L 4	
	NOEC	3072	Fish	=1mg/L 1	
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE SO	OURCE
mineral spirit					

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	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	18mg/L	4
n-butyl acetate	EC50	48	Crustacea	=32mg/L	1
	EC50	72	Algae or other aquatic plants	=674.7mg/L	1
	EC0	192	Algae or other aquatic plants	=21mg/L	1
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
solvent naphtha petroleum, medium aliphatic.	EC50	48	Crustacea	>100mg/L	1
	EC50	96	Algae or other aquatic plants	=450mg/L	1

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. **DO NOT** discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
n-butyl acetate	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
isoparaffins petroleum hydrotreated HFP	LOW (BCF = 159)
n-butyl acetate	LOW (BCF = 14)

Mobility in soil

Ingredient	Mobility
n-butyl acetate	LOW (KOC = 20.86)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal

- ► Containers may still present a chemical hazard/ danger when empty.
- ▶ Return to supplier for reuse/ recycling if possible.

Otherwise

- ► If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- ▶ Where possible retain label warnings and SDS and observe all notices pertaining to the product.
- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- ► Where in doubt contact the responsible authority.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material).
- ▶ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

SECTION 14 TRANSPORT INFORMATION

Labels Required



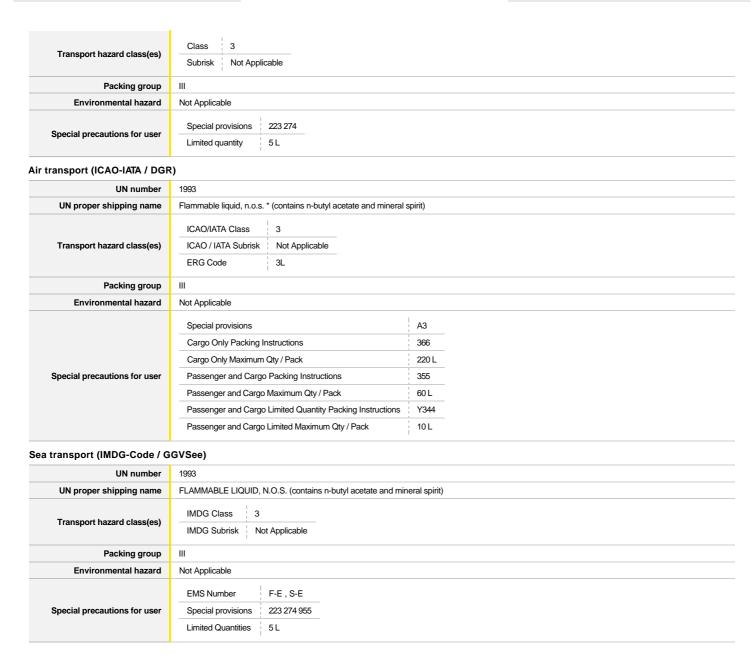
Land transport (ADG)

UN number	1993
UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (contains n-butyl acetate and mineral spirit)

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Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

Australia Exposure Standards Australia Hazardous Substances Information System - Consolidated Lists MINERAL SPIRIT (64475-85-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS Not Applicable N-BUTYL ACETATE (123-86-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS Australia Exposure Standards Australia Inventory of Chemical Substances (AICS) International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs MINERAL SPIRIT (64475-85-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS Not Applicable N-BUTYL ACETATE (123-86-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS Australia Exposure Standards Australia Inventory of Chemical Substances (AICS) Australia Hazardous Substances Information System - Consolidated Lists

SOLVENT NAPHTHA PETROLEUM, MEDIUM ALIPHATIC.(64742-88-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards	Australia Inventory of Chemical Substances (AICS)
Australia Hazardous Substances Information System - Consolidated Lists	International Agency for Research on Cancer (IARC) - Agents Classified by the IARC
	Monographs

National Inventory	Status
Australia - AICS	N (mineral spirit)
Canada - DSL	Υ

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Canada - NDSL	N (mineral spirit; n-butyl acetate; solvent naphtha petroleum, medium aliphatic.; isoparaffins petroleum hydrotreated HFP)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	N (mineral spirit)
Japan - ENCS	N (mineral spirit; solvent naphtha petroleum, medium aliphatic.)
Korea - KECI	N (mineral spirit)
New Zealand - NZIoC	Υ
Philippines - PICCS	Υ
USA - TSCA	N (mineral spirit)
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

Name	CAS No
isoparaffins petroleum hydrotreated HFP	64742-47-8., 64742-82-1., 8052-41-3., 1030262-12-4., 101795-05-5.

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit.

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection

OTV: Odour Threshold Value BCF: BioConcentration Factors

BEI: Biological Exposure Index

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