

1. Product and Company Identification LIME-A-WAY® CLEANER (Sprayer) Product Name **UPC CODES** Refer to Section 16 CAS # Mixture **Product Use** Cleaner **Distributed by** Reckitt Benckiser (Canada) Inc. 1680 Tech Avenue Unit #2 Mississauga, ON L4W 5S9 In Case of Emergency: 1-800-888-0192 Transportation Emergencies: 24 Hour Number: North America: CHEMTREC: 1-800-424-9300 Outside North America: 1-703-527-3887 LEGEND Health 3 HMIS/NFPA 0 Flammability Severe 4 3 0 3 Serious **Physical Hazard** 0 2 Moderate 1 Sliaht Personal Protection D Minimal 0 2. Hazards Identification **DANGER -- CORROSIVE Emergency Overview** CAUSES BURNS. DANGEROUS FUMES FORM WHEN MIXED WITH OTHER PRODUCTS. DO NOT mix with bleach or other household chemicals. DO NOT swallow. DO NOT get in eyes. DO NOT get on skin or clothing. DO NOT breathe fumes. DO NOT spray towards face. Handle with care. Wear rubber gloves and eye protection. Use in well-ventilated area. To open, wear rubber gloves and press tab in and hold down while turning nozzle. To close, turn nozzle back until tab locks into position. Always re-close after use and store closed. Keep out of reach of children. Potential short term health effects **Routes of exposure** Eye, Skin contact, Inhalation, Ingestion. Eyes Corrosive liquid. Risk of serious damage to eyes. Avoid eye contact. Corrosive liquid. Skin Avoid skin contact. Not expected to be a skin sensitizer. Do not breathe spray. Inhalation Avoid breathing vapors. Use only in a well ventilated area. May be harmful if swallowed. Ingestion Contains sulfamic acid. Target organs Eves. Skin. Chronic effects The finished product is not expected to have chronic health effects. The product causes burns of eyes, skin and mucous membranes. Signs and symptoms

3. Composition/Information on Ingredients

Ingredient(s)	CAS #	Percent
Sulfamic acid	5329-14-6	5 - 10

4. First Aid Measures

First aid procedures	
Eye contact	If in eyes, rinse with water for 15 minutes.
Skin contact	If on skin, rinse well with water. If on clothes, remove clothes.
Inhalation	If breathed in, move person into fresh air.
Ingestion	If swallowed, call a Poison Control Centre or doctor immediately. DO NOT induce vomiting.
Notes to physician	Contains sulfamic acid.
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	Not flammable by WHMIS criteria.
Extinguishing media	
Suitable extinguishing media	Treat for surrounding material.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighers	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of nitrogen. Oxides of sulphur.
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	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

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Handling	Corrosive material. CORROSIVE TO EYES AND SKIN. Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing. Avoid contact with wood, fabric and wallpaper.
	NOTE: DO NOT use on natural marble, stone, terrazzo, polished or anodized aluminum, metallic or painted surfaces, coloured grout or counter tops. May etch some older or worn porcelain tubs and sinks or ceramic tile. If in doubt, test hidden areas first.
Storage	Keep out of the reach of children. Keep this material away from food, drink and animal feed. Store in original container in a cool, secure area inaccessible to children and pets.

8. Exposure Controls / Personal Protection

Exposure limit values			
Ingredient(s)	Exposure limit values		
Sulfamic acid	ACGIH-TLV		
	Not established		
Engineering controls	Use only under good ventilation conditions or with respiratory protection.		
Personal protective equipment			
Eye/Face protection	Avoid contact with eyes. Wear chemical goggles. Emergency responders should wear full eye and face protection.		
Hand protection	Rubber gloves. Confirm with a reputable supplier first. Follow label directions carefully. Emergency responders should wear impermeable gloves.		
Skin and body protection	Usual safety precautions while handling the product will provide adequate protection against injury or irritation. Follow label directions carefully. In case of continuous exposure or occupational operations, wear protective clothing designed and appropriate for acid chemical exposure. Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible.		
Respiratory protection	Avoid breathing mists or vapours. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator Emergency responders should wear self-contained breathing apparatus (SCBA) to avo inhalation of vapours generated by this product during a spill or other clean-up operations.		
General hygiene considerations	 S Use good industrial hygiene practices in handling this material. 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.
Colour	Colourless
Form	aqueous solution
Odour	Characteristic
Odour threshold	Not available
Physical state	Liquid
рН	1 (Strongly acidic)
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Flash point	> 93.3 °C (> 199.94 °F) Tagliabue
Evaporation Rate	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability Limits in Air, Upper, % by Volume	Not available
Vapour pressure	Not available
Vapour density	Not available
Specific gravity	1.02 - 1.05
Octanol/water coefficient	Not available
Solubility (H2O)	Complete
Auto-ignition temperature	Not available

10. Stability and Reactivity

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals. Exposure to moisture. DO NOT MIX WITH BLEACH or use in conjunction with other household products.
Incompatible materials	Caustics. Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of nitrogen. Oxides of sulphur.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.

11. Toxicological Information

Component analysis - LC50		
Ingredient(s)	LC50	
Sulfamic acid	Not available	
Component analysis - Oral LD50		
Ingredient(s)	LD50	
Sulfamic acid	1312 mg/kg mouse; 1050 mg/kg guinea pig; 3160 mg/kg rat	
Effects of acute exposure		
Еуе	Corrosive liquid. Risk of serious damage to eyes. Avoid eye contact.	
Skin	Corrosive liquid. Avoid skin contact. Not expected to be a skin sensitizer.	
Inhalation	Do not breathe spray. Avoid breathing vapors. Use only in a well ventilated area.	
Ingestion	May be harmful if swallowed. Contains sulfamic acid.	
Sensitisation	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.	
Synergistic Materials	Not available	

12. Ecological Information

Because of the low pH of this product, it would be expected to produce significant

	ecotoxici	ty upon exposure to aquatic organisms and aquatic systems.	
Ecotoxicity - Freshwater Fish Spe	ecies Data		
Sulfamic acid	5329-14-6	96 Hr LC50 Pimephales promelas: 14.2 mg/L [static]	
Environmental effects	Not avail	Not available	
Aquatic toxicity	Not available		
Persistence and degradability	Not available		
Bioaccumulation/accumulation	Not available		
Partition coefficient	Not available		
Mobility in environmental media	a Not available		
Chemical fate information	Not avail	lable	
Other adverse effects	Not avail	lable	

13. Disposal Considerations

Waste codes	Not available
Disposal instructions	Dispose in accordance with all applicable regulations.

Ecotoxicity

14. Transport Information

U.S. Department of Transportation (DOT)

UN 3264 - Corrosive Liquid, Acidic, Inorganic, N.O.S. (Sulfamic Acid), Class 8, Packing Group II, Limited Quantity

Transportation of Dangerous Goods (TDG - Canada)

UN 3264 - Corrosive Liquid, Acidic, Inorganic, N.O.S. (Sulfamic Acid), Class 8, Packing Group II, Limited Quantity

IMDG (Marine Transport)

UN 3264 - Corrosive Liquid, Acidic, Inorganic, N.O.S. (Sulfamic Acid), Class 8, Packing Group II, Limited Quantity

	15. Regulatory Information	
Canadian federal regulations	hazard criteria of the Controlled ormation required by the	
	Product Registration: Not registered	
Canada - WHMIS - Ingredient I	Disclosure List	
Sulfamic acid	5329-14-6 1 %	
WHMIS classification	Exempt - Consumer product	
Inventory Status		
Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
A "Yes" indicates that all co country(s)	mponents of this product comply with the inventory requirements	s administered by the governing
	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	51700-50000 - LIME-A-WAY® Cleaner (Sprayer) - 473	mL - 368926
Issue date	12-May-2010	
Effective Date	15-May-2010	
Expiry Date	15-May-2013	
Prepared by	Reckitt Benckiser Regulatory Department 800-333-3899	Э
Other Information	For an updated MSDS, please contact the supplier/man page of the document.	