

SAFETY DATA SHEET

LIME-A-WAY® CLEANER (Sprayer)



HEALTH • HYGIENE • HOME

1. Product and company identification

Product name : LIME-A-WAY® CLEANER (Sprayer)
Supplier : Reckitt Benckiser LLC.
Morris Corporate Center IV
399 Interpace Parkway (P.O. Box 225)
Parsippany, New Jersey 07054-0225
+1 973 404 2600

Reckitt Benckiser (Canada) Inc.
1680 Tech Avenue, Unit #2
Mississauga, Ontario L4W 5S9
CANADA
Telephone: +1 905 283 7000

Material uses : Lime deposit (calcium) remover & Rust removers
Product use : Consumer
SDS # : 368926PSDS v4.0
Formulation #: : 1201-074B (368926 v8.0)
UPC Code / Sizes : 51700-50000 (473 ml. Trigger Spray bottle)

Manufacturer : Reckitt Benckiser LLC.
Morris Corporate Center IV
399 Interpace Parkway (P.O. Box 225)
Parsippany, New Jersey 07054-0225
+1 973 404 2600

Validation date : 06/01/2015.
Emergency telephone number : 1-800-338-6167
Transport Emergency phone: : 1-800-424-9300 (U.S. & Canada) CHEMTREC
Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

2. Hazards identification

Emergency overview

Physical state : Liquid.
Color : Clear.
Odor : Characteristic.
Signal word : DANGER
Hazard statements : POISON
CORROSIVE
CAUSES BURNS. CONTENTS MAY BE HARMFUL. DANGEROUS FUMES FORM WHEN MIXED WITH OTHER PRODUCTS.

Precautionary measures : Keep out of reach of children. Do not mix with bleach or Other household chemicals. Do not swallow. Do not get in eyes, on skin or on clothing. Do not breathe fumes. Handle with care. Wear protective gloves and eye protection. Use only in a well-ventilated area.

368926PSDS v4.0

2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential acute health effects

- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Ingestion** : Harmful if swallowed.
- Skin** : Severely irritating to the skin.
- Eyes** : Severely irritating to eyes. Risk of serious damage to eyes.

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: skin, eyes.

Over-exposure signs/symptoms

- Skin** : Adverse symptoms may include the following:
irritation
redness
- Eyes** : Adverse symptoms may include the following:
pain or irritation
watering
redness

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	%
Sulphamic acid	5329-14-6	5 - 10

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.

4. First aid measures

First aid : If swallowed, call a Poison Control Centre or doctor immediately. Do not induce vomiting. If in eyes, rinse with water for 15 minutes. If on skin, rinse well with water. If on clothes, remove clothes. If breathed in, move person to fresh air.

Protection of first-aiders : Use personal protective equipment as required.

Notes to physician : Treat symptomatically.

5. Fire-fighting measures

Flammability Remark : Not available.

Explosibility Remark : Not available.

Flammability of the product In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable Use an extinguishing agent suitable for the surrounding fire.

Not suitable None known.

Special hazards arising from the substance or mixture

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:
nitrogen oxides
sulfur oxides

Advice for firefighters

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.

Special remarks on explosion hazards

Sensitivity to mechanical impact Not available.

Sensitivity to static discharge Not available.

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. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

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 for 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. Approach release from upwind. 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). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : 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. Separate from alkalis. 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.

8. Exposure controls/personal protection

<u>Occupational exposure limits</u>		<u>TWA (8 hours)</u>			<u>STEL (15 mins)</u>			<u>Ceiling (ACGIH TLV)</u>			<u>Notations</u>
<u>Ingredient</u>	<u>List name</u>	<u>ppm</u>	<u>mg/m³</u>	<u>Other</u>	<u>ppm</u>	<u>mg/m³</u>	<u>Other</u>	<u>ppm</u>	<u>mg/m³</u>	<u>Other</u>	
No exposure limit value known.											

- 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. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Manufacturer: Exposure controls

- Engineering measures** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- 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.

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** : 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- 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 or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

8. Exposure controls/personal protection

- 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.
- 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.
- Other protection** : Not available.

9. Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: >93.3°C (>199.9°F)
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Auto-ignition temperature** : Not available.
- Flammable limits** : Not available.
- Color** : Clear.
- Odor** : Characteristic.
- Taste** : Not available.
- Molecular weight** : Not applicable.
- Molecular formula** : Not applicable.
- pH** : 0.4 to 1.1 [Conc. (% w/w): 100%][25°C]
- Boiling/condensation point** : Not available.
- Melting/freezing point** : Not available.
- Critical temperature** : Not available.
- Relative density (g/ml)** : 1.039 to 1.045 @ 25°C
- Bulk density** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Volatility** : Not available.
- Odor threshold** : Not available.
- Evaporation rate** : Not available.
- SADT** : Not available.
- Viscosity** : Not available.
- Ionicity (in water)** : Not available.
- Dispersibility properties** : Not available.
- Solubility** : Easily soluble in the following materials: cold water and hot water.
- Physical/chemical properties comments** : Not available.

368926PSDS v4.0

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.
- Conditions to avoid** : Do not mix with household chemicals.
Keep away from extreme heat. Protect from moisture. Keep from freezing.
- Incompatible materials** : Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air.
Reactive or incompatible with the following materials:
alkalis
Metal.
- 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

Product/ingredient name	Result	Species	Dose	Exposure
sulphamidic acid	LD50 Oral	Rat	3160 mg/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Not available.				

Conclusion/Summary : Harmful if swallowed.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
sulphamidic acid	Eyes - Moderate irritant	Rabbit	-	20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms	-
	Skin - Mild irritant	Human	-	120 hours 4 Percent Intermittent	-
	Skin - Severe irritant	Rabbit	-	24 hours 500 milligrams	-

Conclusion/Summary : Not available.

Skin : Severely irritating to the skin.

Eyes : Severely irritating to eyes. Risk of serious damage to eyes.

Respiratory : Not available.

Sensitizer

Product/ingredient name	Route of exposure	Species	Result
Not available.			

Conclusion/Summary : Not available.

Skin : Not available.

Respiratory : Not available.

Carcinogenicity

368926PSDS v4.0

11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Not available.				

Conclusion/Summary : Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Not available.						

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Not available.			

Conclusion/Summary : Not available.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Not available.				

Conclusion/Summary : Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Not available.						

Conclusion/Summary : Not available.

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
sulphamidic acid	Acute LC50 14200 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Conclusion/Summary : Not available.

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Not available.				

Conclusion/Summary : Not available.

Partition coefficient: n-octanol/water : Not available.

Bioconcentration factor : Not available.

Mobility : Not available.

Toxicity of the products of biodegradation : Not available.

Other adverse effects : No known significant effects or critical hazards.

Release of large quantities into water may cause a pH-change resulting in danger for aquatic life.

368926PSDS v4.0

13. Disposal considerations

Waste disposal

: 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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

For long distance transport of bulk material or shrunk pallet take into consideration sections 7 and 10.

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN3264	Corrosive liquid, acidic, inorganic, n.o.s. (sulphamidic acid)	8	II	 	<u>Limited quantity 16 oz (473 mL) size only.</u> <u>1 Gallon size, see 49 CFR Haz Table</u>
TDG Classification	UN3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphamidic acid)	8	II	 	<u>Limited quantity 16 oz (473 mL) size only.</u> <u>1 Gallon size, see TDG DG List</u>
Mexico Classification	UN3264	LIQUIDO CORROSIVO, ACIDO, INORGANICO, N.E.P. (sulphamidic acid, mixture)	8	II	 	<u>Limited quantity 16 oz (473 mL) size only.</u> <u>1 Gallon size, see MX NOMS</u>

368926PSDS v4.0

14. Transport information

IMDG Class	UN3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphamidic acid)	8	II	 	<u>Limited quantity 16 oz (473 mL) size only.</u> <u>1 Gallon size, see IMDG DG List</u>
IATA-DGR Class	UN3264	Corrosive liquid, acidic, inorganic, n.o.s. (sulphamidic acid)	8	II		<u>See DG List.</u>

PG* : Packing group

15. Regulatory information

United States

U.S. Federal regulations : **TSCA 8(a) PAIR:** 1,1'-oxydipropan-2-ol
SARA 302/304: No products were found.
SARA 311/312 Hazards identification: Immediate (acute) health hazard, Delayed (chronic) health hazard

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

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 311/312 HCS 1994

Classification : Immediate (acute) health hazard
 Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
sulphamidic acid	5 - 10	No.	No.	No.	Yes.	Yes.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : The following components are listed: SULPHAMIC ACID; SULFAMIC ACID

368926PSDS v4.0

15. Regulatory information

Pennsylvania : None of the components are listed.

Canada

WHMIS (Canada) : Class E: Corrosive material

Canadian lists

Canadian NPRI : None of the components are listed.

CEPA Toxic substances : None of the components are listed.

Canada inventory : At least one component is not listed in DSL but all such components are listed in NDSL.

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.

16. Other information

Hazardous Material Information System (U.S.A.) :

Health	3
Flammability	0
Physical hazards	0
Personal protection	D

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

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.

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Version : 4

368926PSDS v4.0

16. Other information

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Revision comments : Update & Revision of the SDS.

▣ Indicates information that has changed from previously issued version.

Notice to reader

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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.