SAFETY DATA SHEET



Lime-A-Way Automatic Toilet Bowl Cleaner

1. Product and company identification

Product name

: Lime-A-Way Automatic Toilet Bowl Cleaner

Distributed by

Reckitt Benckiser LLC.
 Morris Corporate Center IV

399 Interpace Parkway (P.O. Box 225) Parsippany, New Jersey 07054-0225

+1 973 404 2600

Emergency telephone number (Medical)

: 1-800-338-6167

Emergency telephone number (Transport)

: 1-800-424-9300 (U.S. & Canada) CHEMTREC

Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

Website: : http://www.rbnainfo.com

Product use : Toilet bowl cleaner

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS 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 regulations, and shown in Section 15 of this SDS.

SDS # : D8091517 3.0

Formulation #: : (2055-022) 8076704 v1.0

UPC Code / Sizes : 1 X 40g and 2 X 40g block in Blister (front) and Laminate foil (back)

2. Hazards identification

Classification of the substance or mixture

: ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms





Signal word : Danger

Hazard statements: Harmful if swallowed.

Causes serious eye damage.

Causes skin irritation.

May cause an allergic skin reaction.

2. Hazards identification

Precautionary statements

General

: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention

: Wear protective gloves. Wear eye or face protection. Avoid breathing dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response

: IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Storage Disposal

- : Not applicable.
- : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

: None known.

Hazards not otherwise

: None known.

classified

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
sodium dodecylbenzenesulfonate sodium carbonate	15 - 30 15 - 30 1 - 2.5 0.1 - 1	68439-57-6 25155-30-0 497-19-8 54464-57-2

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

Description of necessary first aid measures

Eye contact

: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation

: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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4. First aid measures

Skin contact

: Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory

system.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion : Harmful if swallowed. May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

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.

specific treatments . No specific treatment.

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

See toxicological information (Section 11)

Protection of first-aiders

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

: None known.

Specific hazards arising from the chemical

Hazardous thermal decomposition products : Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides

phosphorus oxides metal oxide/oxides

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.

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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 nonemergency 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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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. Store locked up. 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

Control

Occupational exposure limits

Not applicable.

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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

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. Contaminated work clothing should not be allowed out of the workplace. 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: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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. 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.

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.

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8. Exposure controls/personal protection

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, particulate filter 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.

9. Physical and chemical properties

Appearance

Physical state : Solid. [Block]
Color : Green. [Dark]

Odor threshold : Characteristic.

Odor threshold : Not available.

pH : 7 [Conc. (% w/w): 10%]

Melting point: Not available.Boiling point: Not available.

Flash point : Closed cup: >93.3°C (>199.9°F)

Evaporation rate : Not available.
Flammability (solid, gas) : Not available.
Lower and upper explosive : Not available.

(flammable) limits

Vapor pressure: Not available.Vapor density: Not available.Relative density: Not available.

Solubility : Partially soluble in the following materials: cold water and hot water.

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

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

Under normal conditions of storage and use, hazardous reactions will not occur.

reactions

Conditions to avoid

Incompatible materials

: Keep away from extreme heat. Protect from moisture.

Hazardous decomposition

: Do not mix with household chemicals.

products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	LD50 Oral	Rat	2310 mg/kg	-
sodium dodecylbenzenesulfonate	LD50 Oral	Rat	438 mg/kg	-
sodium carbonate	LD50 Dermal LD50 Oral		>2000 mg/kg 2800 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
sodium dodecylbenzenesulfonate	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms	-
•	Eyes - Severe irritant	Rabbit	-	1 Percent	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
sodium carbonate	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100	-
	Eyes - Moderate irritant	Rabbit	-	milligrams 24 hours 100 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

11. Toxicological information

Inhalation : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory

system.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: Harmful if swallowed. May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

pain watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion: Adverse symptoms may include the following:

stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

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
Oral	1845.4 mg/kg

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Acute EC50 4.53 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
sodium dodecylbenzenesulfonate	Acute EC50 29000 μg/l Fresh water	Algae - Chlorella pyrenoidosa - Exponential growth phase	96 hours
	Acute EC50 7.81 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 0.15 ppm Fresh water Acute IC50 112.4 mg/l	Daphnia - Daphnia pulex Algae - Pseudokirchneriella subcapitata - Exponential growth phase	48 hours 72 hours
sodium carbonate	Acute LC50 1.18 ppm Fresh water Acute EC50 242000 µg/l Fresh water Acute LC50 176000 µg/l Fresh water Acute LC50 265000 µg/l Fresh water Acute LC50 300000 µg/l Fresh water	Fish - Lepomis macrochirus Algae - Navicula seminulum Crustaceans - Amphipoda Daphnia - Daphnia magna Fish - Lepomis macrochirus	96 hours 96 hours 48 hours 48 hours 96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
sodium carbonate	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Sulfonic acids, C14-16-alkane hydroxy and	-1.3	-	low
C14-16-alkene, sodium salts sodium dodecylbenzenesulfonate	1.96	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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. 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.

13. Disposal considerations

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

Not a DOT controlled material (United States). Not a TDG-controlled material. This preparation is not classified as dangerous according to international transport regulations (ADR/RID, IMDG or ICAO/IATA).

15. Regulatory information

U.S. Federal regulations

: TSCA 8(a) PAIR: α-hexylcinnamaldehyde; 2-(4-tert-butylbenzyl)propionaldehyde; bornan

-2-one; 2-methylundecanal; dodecanal; 2-benzylideneheptanal

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): Not determined.

Clean Water Act (CWA) 311: sodium dodecylbenzenesulfonate

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

Olean II Och tarana

: Not listed

Class II Substances

DEA List I Chemicals (Precursor Chemicals)

: Not listed

DEA List II Chemicals

(Essential Chemicals)

: Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	15 - 30	No.	No.	No.	Yes.	No.
sodium dodecylbenzenesulfonate	15 - 30	Yes.	No.	No.	Yes.	No.
sodium carbonate	_	No.	No.	No.	Yes.	No.
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone	0.1 - 1	No.	No.	No.	Yes.	No.

State regulations

Massachusetts

: The following components are listed: SODIUM SULFATE (SOLUTION); SODIUM DODECYLBENZENE SULFONATE; PRECIPITATED SILICA

15. Regulatory information

New York : The following components are listed: Sodium dodecylbenzene sulfonate;

Dodecylbenzene sulfonate

New Jersey : The following components are listed: SODIUM DODECYLBENZENE SULFONATE;

BENZENESULFONIC ACID, DODECYL-, SODIUM SALT; SILICA, AMORPHOUS,

PRECIPITATE & GEL

Pennsylvania: The following components are listed: SODIUM SULFATE (SOLUTION);

BENZENESULFONIC ACID, DODECYL-, SODIUM SALT; PRECIPITATED SILICA

<u>Label elements</u>

Signal word : WARNING

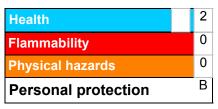
Hazard statements : Causes severe eye and skin irritation.

Precautionary measures : Keep out of reach of children. Do not get in eyes or on skin or clothing. Wash hands

after handling. Contains Surfactants.

16. Other information

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



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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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

Date of issue : 18/02/2015.

Date of previous issue : 02/05/2013.

Version : 3

Prepared by : Reckitt Benckiser LLC.

Product Safety Department

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Montvale, New Jersey 07646-1810 USA.

FAX: 201-476-7770

Revision comments: Update as per US GHS.

Indicates information that has changed from previously issued version.

Notice to reader

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.



RB is a member of the CSPA Product Care Product Stewardship Program.

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