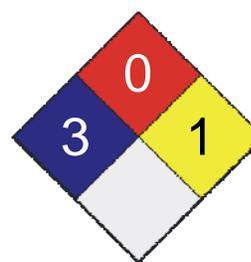


1. Product and Company Identification

Product Name LIME-A-WAY® - Toilet Bowl Cleaner - Liquid
UPC CODES Refer to Section 16
CAS # Mixture
Product use Cleaner
Manufacturer Reckitt Benckiser
 Morris Corporate Center IV
 399 Interpace Parkway
 P.O. Box 225
 Parsippany, NJ 07054-0225
 In Case of Emergency: 1-800-228-4722
 Transportation Emergencies: 24 Hour Number:
 North America: CHEMTREC: 1-800-424-9300
 Outside North America: 1-703-527-3887

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

Health	/ 3
Flammability	0
Physical Hazard	0
Personal Protection	D



2. Hazards Identification

Emergency overview

DANGER -- CORROSIVE
 Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. **HARMFUL OR FATAL IF SWALLOWED. DO NOT ingest.** Wear protective eyewear, gloves and protective clothing. Wash thoroughly with soap and water after handling. **DO NOT** breathe vapor or fumes. Use in well-ventilated areas. **DO NOT** mix with bleach or other household chemicals as harmful fumes may result. Fumes are corrosive to metal. Contains hydrochloric acid.

KEEP OUT OF REACH OF CHILDREN.

Potential short term health effects

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Eyes	Corrosive liquid. Causes eye damage. Do not get into eyes.
Skin	Corrosive liquid. Causes skin damage. Do not get on skin or clothing. Not expected to be a skin sensitizer.
Inhalation	Do not breathe vapor or fumes. Use only in a well ventilated area. For occupational exposures, ensure adequate exhaust ventilation to control contaminant levels are below the TLV or PEL, or wear appropriate personal protective equipment (respirator).
Ingestion	Harmful if swallowed. Contains hydrochloric acid.
Target organs	Eyes. Skin.
Chronic effects	The finished product is not expected to have chronic health effects.
Signs and symptoms	The product causes burns of eyes, skin and mucous membranes.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Hydrochloric acid	7647-01-0	10 - 20
Alcohols, C12-16, ethoxylated	68551-12-2	1 - 2.5
Ethoxylated aliphatic amines	61791-26-2	1 - 2.5

4. First Aid Measures

First aid procedures

Eye contact	If in eyes, IMMEDIATELY rinse eyes thoroughly with water. Remove any contact lenses and continue rinsing eyes for at least 15 minutes. Immediately call a physician or Poison Control Center.
Skin contact	If on skin, IMMEDIATELY wash with soap and water. Immediately call a physician or Poison Control Center.
Inhalation	If inhaled, move person to fresh air. Immediately call a physician or Poison Control Center for further advice.
Ingestion	If swallowed, do NOT induce vomiting. Rinse mouth and drink a glass of water. IMMEDIATELY call a Physician or Poison Control Center.

Notes to physician

Contains hydrochloric acid.
Probable mucosal damage may contraindicate the use of gastric lavage.

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 OSHA 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 firefighters	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

Handling	Corrosive material. CORROSIVE TO EYES AND SKIN. Use good industrial hygiene practices in handling this material. Do not close toilet bowl lid while soaking. Do not get this material in your eyes, on your skin, or on your clothing.
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 limits

Ingredient(s)	Exposure Limits
Alcohols, C12-16, ethoxylated	ACGIH-TLV Not established OSHA-PEL Not established
Ethoxylated aliphatic amines	ACGIH-TLV Not established OSHA-PEL Not established
Hydrochloric acid	ACGIH-TLV Ceiling: 2 ppm OSHA-PEL Ceiling: 5 ppm
Engineering controls	General ventilation normally adequate.
Personal protective equipment	
Eye / face protection	Avoid contact with eyes. If splashes are likely to occur, wear: Wear chemical goggles and face shield. Emergency responders should wear full eye and face protection.
Hand protection	Wear impervious gloves where the potential for contact with the liquid is possible. 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. Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible.
Respiratory protection	No special requirements under normal use conditions. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Emergency responders should wear self-contained breathing apparatus (SCBA) to avoid inhalation of vapours generated by this product during a spill or other clean-up operations.
General hygiene considerations	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.
Color	Green
Form	aqueous solution
Odor	Wintergreen
Odor threshold	Not available
Physical state	Liquid
pH	< 1 (Strongly acidic)
Freezing point	Not available

Pour point	Not available
Boiling point	Not available
Flash point	> 199.94 °F (> 93.3 °C) Tagliabue
Evaporation rate	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	1.040 - 1.050
Octanol/water coefficient	Not available
Solubility (H2O)	Complete
Auto-ignition temperature	Not available
Viscosity	Viscous

10. Stability and Reactivity

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals. Exposure to moisture. Corrosive to aluminum. Do not mix with chlorine bleach, or other cleaning and disinfecting chemicals. This product should not be used on or placed on toilet bowl lids, vanities, sinks, bathtubs, cabinets, counter tops, rugs, etc.
Incompatible materials	Caustics. Oxidizers. Aluminum.
Hazardous decomposition products	May include and are not limited to: Oxides of nitrogen. Oxides of sulphur.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Alcohols, C12-16, ethoxylated	Not available
Ethoxylated aliphatic amines	Not available
Hydrochloric acid	935 ppm mouse; 3124 mg/l/4h rat

Component analysis - Oral LD50

Ingredient(s)	LD50
Alcohols, C12-16, ethoxylated	1380 mg/kg rat
Ethoxylated aliphatic amines	620 mg/kg rat
Hydrochloric acid	900 mg/kg rabbit; 700 mg/kg rat

Effects of acute exposure

Eye	Corrosive liquid. Causes eye damage. Do not get into eyes.
Skin	Corrosive liquid. Causes skin damage. Do not get on skin or clothing. Not expected to be a skin sensitizer.
Inhalation	Do not breathe vapor or fumes. Use only in a well ventilated area. For occupational exposures, ensure adequate exhaust ventilation to control contaminant levels are below the TLV or PEL, or wear appropriate personal protective equipment (respirator).
Ingestion	Harmful if swallowed. Contains hydrochloric acid.

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

Chronic effects	The finished product is not expected to have chronic health effects.	
Carcinogenicity	The finished product is not expected to have chronic health effects.	
ACGIH - Threshold Limit Values - Carcinogens		
Hydrochloric acid	7647-01-0	A4 - Not Classifiable as a Human Carcinogen
IARC - Group 3 (Not Classifiable)		
Hydrochloric acid	7647-01-0	Monograph 54 [1992]
Mutagenicity	The finished product is not expected to have chronic health effects.	
Reproductive effects	The finished product is not expected to have chronic health effects.	
Teratogenicity	The finished product is not expected to have chronic health effects.	
Synergistic Materials	Not available	

12. Ecological Information

Ecotoxicity	Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.	
Ecotoxicity - Freshwater Fish Species Data		
Hydrochloric acid	7647-01-0	96 Hr LC50 Gambusia affinis: 282 mg/L [static]
Environmental effects	Not available	
Aquatic toxicity	Not available	
Persistence / degradability	Not available	
Bioaccumulation / accumulation	Not available	
Partition coefficient	Not available	
Mobility in environmental media	Not available	
Chemical fate information	Not available	

13. Disposal Considerations

Waste codes	Not available
Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

U.S. Department of Transportation (DOT)

UN 1760 - Corrosive Liquid, N.O.S. (Hydrochloric Acid, Hydroxyethyl alkylamine), Class 8, PG II, Limited Quantity

Transportation of Dangerous Goods (TDG - Canada)

UN 1760 - Corrosive Liquid, N.O.S. (Hydrochloric Acid,
Hydroxyethyl alkylamine), Class 8, PG II, Limited Quantity

IMDG (Marine Transport)

UN 1760 - Corrosive Liquid, N.O.S., (Contains
Hydrochloric Acid and Hydroxyethyl alkylamine), Class 8, PG II, Limited Quantity

IATA/ICAO (Air)

UN 1760 - Corrosive Liquid, N.O.S., (Contains
Hydrochloric Acid and Hydroxyethyl alkylamine), Class 8, PG II

15. Regulatory Information

US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
CERCLA/SARA Hazardous Substances - Not applicable.

Product Registration: Not registered

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Hydrochloric acid 7647-01-0 5000 Lb final RQ; 2270 kg final RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

Hydrochloric acid 7647-01-0 5000 Lb EPCRA RQ (gas only)

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

Hydrochloric acid 7647-01-0 500 Lb TPQ (gas only)

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Hydrochloric acid 7647-01-0 1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

U.S. - CWA (Clean Water Act) - Hazardous Substances

Hydrochloric acid 7647-01-0 Present

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

Hydrochloric acid: 5000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

State regulations

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

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

Hydrochloric acid 7647-01-0 Present

U.S. - Illinois - Toxic Air Contaminants

Hydrochloric acid 7647-01-0 Present (aerosol)

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

Hydrochloric acid 7647-01-0 5000 Lb RQ (applies to unauthorized emissions based on total mass emitted into or onto all media within any consecutive 24-hour period); 1000 lb RQ (applies to unauthorized emissions based on total mass emitted into the atmosphere)

U.S. - Massachusetts - Right To Know List

Hydrochloric acid 7647-01-0 Extraordinarily hazardous

U.S. - Minnesota - Hazardous Substance List

Hydrochloric acid 7647-01-0 Present

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

Hydrochloric acid 7647-01-0 sn 1012

U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

Hydrochloric acid 7647-01-0 5000 Lb RQ (air); 100 lb RQ (land/water)

U.S. - North Carolina - Control of Toxic Air Pollutants

Hydrochloric acid 7647-01-0 0.7 mg/m3 (acute irritants)

U.S. - Ohio - Extremely Hazardous Substances - Threshold Quantities

Hydrochloric acid 7647-01-0 500 Lb TQ (gas only)

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

Hydrochloric acid 7647-01-0 Environmental hazard

U.S. - Rhode Island - Hazardous Substance List

Hydrochloric acid 7647-01-0 Toxic; Flammable

U.S. - Texas - Tier II Chemical Reporting - Extremely Hazardous Substances - Reportable Quantities

Hydrochloric acid 7647-01-0 5000 Lb RQ

U.S. - Texas - Tier II Chemical Reporting - Extremely Hazardous Substances - Threshold Planning Quantities

Hydrochloric acid 7647-01-0 500 Lb TPQ (gas)

Inventory status

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

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

16. Other Information

Disclaimer

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

Further information

51700-39700 - LIME-A-WAY® Toilet Bowl Cleaner Liquid - 16 oz. - 0253892

51700-39705 - LIME-A-WAY® Toilet Bowl Cleaner Liquid - 24 oz. - 0253892

Issue date

09-Mar-2010

Effective date

01-Mar-2010

Prepared by

Reckitt Benckiser Regulatory Department 800-333-3899

Other information

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