

Material Safety Data Sheet

the works[®] Toilet Bowl Cleaner

Item UPC Numbers	74157-03302 (32 oz. 2-pack)	74157-03305 (32 oz. cs/8)	74157-03310 (32 oz. cs/12)
	74157-03315 (16 oz. cs/12)	74157-03317 (24 oz. cs/12)	74157-08815 (16 oz. cs/12)
	74157-08817 (24 oz. cs/12)	74157-08818 (30 oz. cs/12)	

Section I. Manufacturer Information

Manufacturer: Lime-O-Sol Company
P.O. Box 395 (State Road 4)
Ashley, IN 46705

Date Issued or Last Revised: 07 May 2001
Supercedes: 05 February 2001

**For Health and Safety Related Issues or Concerns,
call (800) 347-7784 (24-Hour Hot Line)**

For other (non-emergency) information,
call (800) 448-5281

Section II. Hazardous Ingredients/Identity Information

<u>Hazardous Components</u>	<u>Weight %</u>	<u>CAS #</u>	<u>EXPOSURE LIMIT(S)</u>
Hydrogen chloride (Hydrochloric acid)	15 – 25%	7647-01-0	(OSHA) Ceiling PEL 5 ppm or 7 mg/m ³ (ACGIH) CeilingTLV 5 ppm or 7 mg/m ³

<u>Other Ingredients</u>	<u>Weight %</u>	<u>CAS #</u>	<u>EXPOSURE LIMIT(S)</u>
Water (and other non-hazardous ingredients)	75 – 85%	7732-18-5 n/a	OSHA PEL NOT ESTABLISHED ACGIH TLV NOT ESTABLISHED

Section III. Physical/Chemical Characteristics

APPEARANCE	blue to green, non-viscous clear liquid
ODOR	pungent, slight mint
SPECIFIC GRAVITY (H ₂ O = 1)	1.10
LIQUID DENSITY (lbs./gallon)	9.17
pH	< 1
FREEZING POINT	< -40°F
BOILING POINT	> 215°F
VAPOR PRESSURE (mm Hg @ 20°C)	< 2mm
VAPOR DENSITY (AIR = 1)	not available
SOLUBILITY IN WATER	Complete
Evaporation Rate (butyl acetate = 1)	>1

Section IV. Fire and Explosion Hazard Data

Flash Point (TCC)	None detected
Autoignition Temperature	None
Flammable Limits	LEL: not applicable UEL: not applicable
Extinguishing Media:	use appropriate extinguisher for fire in surrounding area
Special Fire Fighting Procedures	Note above
Unusual Fire & Explosion Hazards	Although not flammable, a latent fire or explosion hazard exists when product is in contact with certain metals, due to the separation of flammable hydrogen gas.

Section V. Reactivity Data

Stability	___unstable <u>X</u> stable
Conditions to Avoid	Contact with metals or metallic surfaces
Incompatibility (Materials to Avoid)	Avoid contact with corrosive materials and other cleaners. Contact with hypochlorites (bleaches), sulfides or cyanides will release toxic gases.
Hazardous Decomposition / Products	Flammable hydrogen gas may be released on contact with certain metals.
Hazardous polymerization	___May occur <u>X</u> Will not occur.
Conditions to Avoid	None.

Section VI. Health Hazard Data

ACUTE HEALTH HAZARDS

Skin and eye irritant. Rapidly causes burns to exposed tissues.
(see *EMERGENCY AND FIRST AID PROCEDURES*)

CHRONIC HEALTH HAZARDS

NONE KNOWN

SIGNS AND SYMPTOMS OF EXPOSURE / *EMERGENCY AND FIRST AID PROCEDURES*

INHALATION – May cause severe respiratory irritation.

Avoid breathing vapors or mist. Move patient to fresh air and call physician if breathing difficulty develops. If patient is not breathing, give artificial respiration.

EYES –

May cause permanent eye injury, as well as pain and severe irritation.

Immediately flush eyes with clean water. Remove contact lenses, if applicable. Continue flushing for 15 minutes, holding eyelids open. Get medical attention immediately.

DERMAL (skin) – Causes severe burns.

Immediately flush affected area of skin with water for at least fifteen minutes while removing contaminated clothing and shoes. Get medical attention immediately. Launder affected clothing and thoroughly clean contaminated shoes before reusing.

INGESTION – Ingested product may be harmful or fatal. Causes internal burns.

Do NOT induce vomiting. If conscious, drink large quantities of water, followed with milk of magnesia, beaten eggs or vegetable oil. Get immediate medical attention. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Pre-existing skin and eye disorders may be aggravated by exposure to this product.

CARCINOGENICITY

This product contains no known ingredients that are listed as known or suspected human carcinogens by IARC, NTP, OSHA or ACGIH

Section VII. Precautions for Safe Handling and Use

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED

Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. For large spills, dike for later disposal.

WASTE DISPOSAL METHOD

Dispose of according to local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Store bottle securely closed, in upright position. Follow label directions for use.

OTHER PRECAUTIONS

Avoid contact with eyes and skin.

Avoid breathing vapors.

Section VIII. Control Measures

RESPIRATORY PROTECTION (Will vary by use and conditions)

- None required if used as directed (AVOID BREATHING VAPORS OR MIST.)

VENTILATION - *ADEQUATE*

- Local n/a
- Mechanical n/a
- Special n/a
- Other n/a

PROTECTIVE GLOVES

Rubber gloves

EYE PROTECTION

Safety glasses (with side shields), goggles or face shield

OTHER PROTECTIVE EQUIPMENT

Rubber apron if using large amounts

WORK/HYGIENIC PRACTICES

Avoid contact with skin and eyes

Section IX. Special Precautions*

SPECIAL LABELING INFORMATION:

HMIS Rating:	Health: 3	Hazard Ratings: 0 – insignificant hazard
	Flammability: 0	1 – slight hazard
	Reactivity: 0	2 – moderate hazard
		3 – high hazard
NFPA Rating:	Health: 3	4 – very high hazard
	Flammability: 0	
	Reactivity: 0	

NOTICES

*This document has been prepared using data from sources considered scientifically and technically reliable. Actual conditions of use and handling of this product are beyond Seller's control. Seller shall not be responsible for the mishandling or misuse of the product, or treatment upon exposure. No statement contained herein constitutes a warranty, express or implied. User is responsible to evaluate all available information when using product for any particular use, and to comply with all federal, state and local laws and regulations.

*Due to different applicable laws and regulations, and different volumes of the chemicals/mixtures involved, the information contained herein may not match the label on the consumer product.

*Various Government agencies (i.e. Department of Transportation, Occupational Safety and Health Administration, Food and Drug Administration and others) may have specific regulations concerning the transportation, handling, storage or use of this product that may not be contained herein. The customer or user of this product should be familiar with these regulations.