



SAFETY DATA SHEET

HMIS:
Health- 2 Flammability- 0 Reactivity- 0 Pers.
Protection- D

NFPA:
Health- 2 Flammability- 0 Reactivity- 0 Special Hazard-
N

WHMIS: D 2 B

Section 1: Product and Company Identification

Product: Lime Scale Remover

Synonyms:

NILODOR, INC.

10966 INDUSTRIAL PARKWAY NW
BOLIVAR, OHIO 44612, USA

Non-Emergency:
US 800-443-4321

24 hr Emergency Spill Information:
Chem-Tel, Inc.

International +01-330-874-1017

US, Canada: 800-255-3924. International:
+01-813-248-0585

Section 2. Hazards Identification

EMERGENCY OVERVIEW

Appearance/Odor: Transparent green liquid, little if any odor.



WARNING

Flammability : Not classified as flammable

Health Hazards Listed : CORROSIVE

Ecological Hazards Listed : None known

Potential Health Effects: See section 11 for more information.

Risk Phrases: R36/37/38 - Irritating to eyes, respiratory system and skin
R22 - Harmful if swallowed
R66 - Repeated exposure may cause skin dryness or cracking

Safety Phrases: S2 - Keep out of the reach of children
S7 - Keep container tightly closed
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

Hazard Phrases: H302 - Harmful if swallowed
H305 - May be harmful if swallowed and enters airways
H320 - Causes eye irritation

Precautionary P202 - Do not handle until all safety precautions have been read and understood.

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Phrases: P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
 P262 - Do not get in eyes, on skin, or on clothing.

Likely Routes of Exposure: Skin, eyes, ingestion, and inhalation

Eye: Direct exposure can irritate
 Skin: Prolonged or repeated exposure may cause dermatitis
 Ingestion: May cause gastrointestinal tract irritation and/or digestive distress
 Inhalation: Direct exposure may cause irritation or upper respiratory tract

Medical Conditions Aggravated By Exposure:

None known

Target Organs: None known

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Potential Environmental Effects: (See section 12 for more information.)

None known

Section 3. Composition/Information on Ingredients

Component	CAS#	% by Weight	WHMIS Controlled
Naturally-Derived Alkylpolyglucoside Mixture	Proprietary	10.0% - 20.0%	N
FCC Racemic Ethyl-2-hydroxypropanoate (GRAS)	97-64-3	< 5.0%	Y
USP/Kosher Grade Propane-1,2,3-triol (GRAS)	56-81-5	< 5.0%	N
FDA FD&C Approved Colorants	Proprietary	< 1.0%	N
FCC Organic 2-hydroxypropane-1,2,3-tricarboxylic acid (GRAS)	77-92-9	< 5.0%	Y
Environmentally Safe, Naturally-Derived Hydrotrope	Proprietary	< 5.0%	N
Water	7732-18-5	60 - 100	N

Section 4. First Aid Measures

Eye Contact: Flush eyes with copious amounts of clean water, holding lids apart. If irritation persists, get medical attention.
 Skin Contact: Wash with soap and water.
 Inhalation: Remove to fresh air.
 Ingestion: Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. If irritation persists, get medical attention.
 Note to Physicians: Product is about as acid as typical gastric fluid.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media: Water, foam, carbon dioxide, dry chemical.
 Unsuitable Extinguishing Media: None known.
 Products of Combustion: Oxides of carbon and nitrogen
 Protection of Firefighters: As for surrounding fire.

Section 6. Accidental Release Measures

Personal Precautions: Keep away from skin and eyes.
 Environmental Precautions: Keep out of surface waters.
 Methods for Containment: Dike area with sand, clay or other suitable material.
 Methods for Clean-Up: Absorb on sand, clay or other suitable material or mop up with water.
 Other Information:

Section 7. Handling and Storage

HANDLING

Do not open until ready to use.

STORAGE

Keep out of the reach of children. Store in closed, original container at ambient temperature.

Section 8. Exposure Controls/Personal Protection

EXPOSURE GUIDELINES

COMPONENT:	TWA:	LD-50
Naturally-Derived Alkylpolyglucoside Mixture	Not Listed	> 2,000 mg/kg
FCC Racemic Ethyl-2-hydroxypropanoate (GRAS)	Not Listed	> 4,090 mg/kg
USP/Kosher Grade Propane-1,2,3-triol (GRAS)	15 mg/m ³	> 25,000 mg/kg Practically Non-Toxic/Relatively Harmless
FDA FD&C Approved Colorants	Not Listed	Not Listed
FCC Organic 2-hydroxypropane-1,2,3-tricarboxylic acid (GRAS)	None established	11 700 mg/kg
Environmentally Safe, Naturally-Derived Hydrotrope	Not Listed	Not Listed
Water	Not applicable	Not applicable

Engineering Controls: Not normally needed. During handling of liquid, prevent contact with skin and eyes by using adequate personal protective equipment.

Eye/Face Protection: Chemical goggles (and face shield if necessary) should be worn to prevent contact

Skin Protection: Rubber or other protective gloves recommended

Respiratory Protection: When exposure above the established standard is likely, a respiratory protection program that complies with OSHA General Industry Standard 1910.134 should be implemented. Wear full face-piece respirators approved by MSHA / NIOSH if mists are expected.

General Hygiene Considerations: Reasonable care. Keep out of beverages and food.

Section 9. Physical and Chemical Properties

Color: Green	Odor: Essentially odorless
Physical State: Liquid	Odor Treshhold:
pH: 1.5 - 3.5	Freezing Point: Not determined.
Evaporation Rate: Not determined.	Boiling Point: >100C / >212F
Flash Point: > 205 F (PMCC)	Flammability(solid,gas): Not applicable.
Upper Flammability Limit: Not determined.	Lower Flammability Limit: Not determined.
Vapor Pressure: Not determined.	Specific Gravity: 1.01 - 1.06

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Vapor Density: Less than air.

Auto-ignition Temperature: Not determined.

Volatile Organic Compound (VOC),%weight:
< 0.1%

Solubility (water): Soluble.

Percent Volatile: 70 - 75% including water

Section 10. Stability and Reactivity

Stability: Stable

Conditions to Avoid: Exposure to alkalis

Incompatible Materials: Alkalis

Hazardous Decomposition Products: None known

Possibility of Hazardous Reactions: Will not occur

Section 11. Toxicology Information

ACCUTE EFFECTS

Oral LD50: Not determined for mixture. Weighted average more than 39 grams per kilogram.

Dermal LD50: Not considered toxic by skin contact. Weighted average more than 100 mg/kg.
Contact with open wounds can be very irritating.

Inhalation: Not toxic by inhalation. Weighted average more than 8 milligrams per Liter.

Eye Irritation: Direct contact will irritate.

Skin Irritation: Prolonged or repeated contact can irritate.

Sensitization: None known.

CHRONIC EFFECTS

Carcinogenicity: None known.

Mutagenicity: None known.

Reproductive Effects: None known.

Developmental Effects: None known.

Section 12. Ecological Information

Ecotoxicity: None known.

Persistence/Degradability: Biodegradable.

Bioaccumulation/Accumulation: None known.

Mobility in Environment: Not determined.

Section 13. Disposal Considerations

Disposal: Dispose according to Federal, State or Provincial, and Local regulations.

Section 14. Transportation Information

US DOT (ground)

Proper Shipping Description: Class 8: LTD QTY

CANADA TDG (ground)

Proper Shipping Description: Class 8: LTD QTY

ICAO (air)

Proper Shipping Description: Corrosive Liquid, Acidic, Organic, n.o.s. (Citric Acid) UN3265 PG III

IMDG (water)

Proper Shipping Description: Corrosive Liquid, Acidic, Organic, n.o.s. (Citric Acid) UN3265 PG III, F-A, S-B

Section 15. Regulatory Information

Global Inventories

TSCA: United States Included

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DSL: Canada	Included
ECL: Korea	Not-Known
PICCS: Philippines	Not-Known
ENCS: Japan	Not-Known
AICS: Australia	Included
IECS: China	Not-Known
EINECS: European Union	Included

SARA 313 Information : Does not contain any SARA 313 substances at reportable levels

California Safe Drinking Water and Toxic Enforcement Act of 1986 :(Proposition 65)

Does not contain any Proposition 65 substances at reportable levels

WHMIS: Canadian Workplace Hazardous Material Information System

D 2 B

Section 16. Other Information

Legends:

NFPA, HMIS:

0=Minimal Hazard, 1=Slight Hazard, 2=Moderate Hazard, 3=Severe Hazard, 4=Extreme Hazard

Prepared By: Technical Dept.

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