



SAFETY DATA SHEET

NON-TOXIC LIME AND SCALE REMOVER

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Trade Name (As Labeled): NON-TOXIC LIME AND SCALE REMOVER
 Product Code: N-31
 Product Use: Removal of lime and scale.
 Synonyms: N-31
 Manufacturer: The Clean Environment Company
 Mailing Address: PO Box 489, Brooklyn, IA 52211
 Company Website: <http://www.cleanevironmentco.com>
 Emergency Phone Number: For First Aid Emergencies, call Poison Control Center at 1-800-222-1222
 Information Phone Number: 844-606-9558 9 a.m. to 5 p.m. CT Mon - Fri except holidays
 Prepared By: The Clean Environment Company
 Company Contact: SDS Coordinator
 Issue Date: Mar. 1, 2016
 Revision: 02
 Revision Date: May 16, 2017

SECTION 2 HAZARDS IDENTIFICATION

Hazardous Materials Identification System (HMIS) Rating Legend: 4-Severe, 3-Serious, 2-Moderate, 1-Slight, 0-Minimal Personal Protection Index: See Section 16	HEALTH	2
	FLAMMABILITY	0
	PHYSICAL HAZARDS	0
	PERSONAL PROTECTION	B

Hazards Classification			
U.S.A.	This product is considered hazardous under the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).		
Global Harmonization System			
Hazard Statements	Category	Signal Word	Pictogram
May be harmful if swallowed.	Acute Toxicity-Oral, Category 5	WARNING	None
Causes skin irritation.	Skin Corrosion/Irritation, Category 2	WARNING	
Causes serious eye irritation.	Eye Damage/Irritation, Category 2A		
Precautionary Statements			
General	If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.		
Prevention	Wash hands and any contacted skin thoroughly after handling. Wear protective gloves such as rubber gloves. Wear eye protection such as safety glasses or goggles.		
Response	IF SWALLOWED: Rinse mouth with water. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. Refer to Section 4 FIRST AID MEASURES, for additional information. IF ON SKIN: Wash with plenty soap and water. If skin irritation occurs, get medical attention. Take off contaminated clothing and wash before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.		
Hazards Not Otherwise Classified (HNOC)	None known		
Percent Ingredients With Unknown Acute Toxicity	0% of product contains ingredients of unknown acute oral toxicity. Refer to Section 3.		



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SECTION 3 COMPOSITION & INFORMATION ON INGREDIENTS

INGREDIENT	CAS NUMBER	% by wt. ¹	LD50, Rat
Aqua (Water)	7732-18-5	70 - 90	Not applicable
Citric Acid	77-92-9	15 - 25	5400 mg/kg
Ethoxylated Alcohol Surfactant	Proprietary	0.5 - 2.0	1378 mg/kg
Xanthan Gum	11138-66-2	0.3 - 0.9	45000 mg/kg
d-Limonene	5989-27-5	0.2 - 0.3	>5000 mg/kg

¹Where ranges are shown, the exact concentration has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES

Eyes:	Immediately flush with water for 15 minutes. If contacts are present, remove after first 5 minutes of flushing and continue flushing for 15 minutes. If irritation persists, have eyes examined and treated by medical personnel.
Skin:	If irritation occurs, wash thoroughly with soap and water. Call a physician if irritation persists.
Inhalation:	Not a likely route of entry. Move to fresh air. Get medical advice if you feel unwell.
Ingestion:	NEVER give anything by mouth if victim is unconscious. Have victim drink water to dilute. Do not induce vomiting unless advised by a physician or poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Call Poison Control at 1-800-222-1222.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point:	Not available.
Extinguishing Media:	As appropriate for surrounding fire. Use dry chemical, CO ₂ , water, or foam extinguisher.
Special Fire Fighting Procedures:	Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.
Unusual Fire and Explosion Hazards:	None known.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Precautions for Responders	
Industrial Setting	Wear appropriate Personal Protective Equipment. See Sec. 8
Spill Containment and Clean-up	
Industrial Setting	Before attempting containment and cleanup, refer to hazard data given. Wet product may be a slip hazard. Stop spill or release at source and contain material. Any disposal practice must be in compliance with local, state, and federal regulations.
Consumer / Household Setting	Small spills can be picked up with absorbent media such as paper towels and disposed of in household trash. Recovered liquid can be disposed of in sanitary sewer. If appropriate, recycle empty container

SECTION 7 HANDLING AND STORAGE

Handling	
Industrial Setting	Wear appropriate Personal Protective Equipment (see Section 8).
Consumer / Household Setting	Use as directed on product label.
Storage	Store in original, labeled container. Keep container closed when not in use. Should be stored between 40° and 100°F in order to insure long life of product.
Other	KEEP OUT OF REACH OF CHILDREN AND PETS.



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SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits	None known.
Engineering Controls	Not applicable
Personal Protective Equipment (PPE)	
Industrial Setting	
Eye Protection	Safety glasses or goggles may be worn for protection.
Skin Protection	Rubber gloves may be worn for protection.
Respiratory Protection	Not required under normal conditions. Good general ventilation required.
Consumer / Household Setting	
Other Measures	Handle in accordance with good industrial hygiene and safety practices.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid, Slightly Viscous
Color	Natural (no dyes added)
Clarity	Slightly turbid
Odor	Characteristic of ingredients.
Odor Threshold	Not available.
pH	1.0 - 2.0
Melting Point	Not available.
Freezing Point	Not available.
Initial Boiling Point and Boiling Range	Not available.
Flash Point	Not available.
Evaporation Rate	Not available.
Upper Explosive Limit (UEL)	Not applicable.
Lower Explosive Limit (LEL)	Not applicable.
Vapor Pressure (mmHg)	Not available.
Relative Density (H ₂ O = 1)	1.08 - 1.13
Vapor Density (Air = 1)	Not available.
Solubility in Water	Miscible
Partition Coefficient: n-octanol/water	Not available.
Viscosity	Not available.
VOC (weight %)	0.25%

SECTION 10 STABILITY AND REACTIVITY

Reactivity	Not available.
Chemical Stability	Stable
Possibility of Hazardous Reactions	Reacts with strong bases. Reacts with strong oxidizers.
Conditions to Avoid	None known.
Incompatible Materials	
Industrial Setting	
Consumer / Household Setting	Cleaning products should not be mixed with other household chemicals, unless specifically stated in the directions for use.
Hazardous Decomposition Products	None known.



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SECTION 11 TOXICOLOGICAL INFORMATION

Potential Routes of Exposure	Eyes, Skin, Ingestion
Effects of Acute Exposure	
Oral Toxicity	No data available.
Dermal Toxicity	No data available.
Inhalation Toxicity	No data available.
Eye Contact	Serious irritant.
Skin Contact	Irritant.
Component Information	Refer to Section 3 for ingredient LD50 (acute oral toxicity).
Effects of Chronic Exposure	Not expected to have chronic health effects.
Sensitization	Not expected to be a sensitizer, based on literature of products containing similar ingredients.
Carcinogenicity	Not expected to have chronic health effects.
NTP	No ingredients listed.
IARC	No ingredients listed.
OSHA	No ingredients listed.
Reproductive Effects	Not expected to have chronic health effects.
Teratogenicity	Not expected to have chronic health effects.
Mutagenicity	Not expected to have chronic health effects.
Target Organ Effects	Not expected to have chronic health effects.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity	No data available.
Persistence and Degradability	This product is expected to be biodegradable based on ingredients.
Bioaccumulative Potential	Not known.
Mobility in Soil	Not known.
Environmental Fate	Not known, but no adverse effects expected.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal	Dispose of in accordance with federal, state, and local regulations. It is the responsibility of the end-user to determine at the time of disposal of the product.
Industrial Setting	This product is not considered hazardous waste by Federal regulations. However, regulations may vary by state. Check with local waste and waste water authorities.
Consumer / Household Setting	Residue remaining in container may be discarded in trash. Quantities greater than residue should be diluted with water and disposed via sanitary sewer.
EPA Hazardous Waste Number:	None.
EPA Hazard Waste Class:	None.
Empty Containers	Recycle containers when available, otherwise discard in trash.

SECTION 14 TRANSPORT INFORMATION

U.S. DOT (Surface Transport)	Not regulated.
IATA (Air Transport)	Not regulated.
IMDG (Marine Transport)	Not regulated.

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SECTION 15 REGULATORY INFORMATION

TSCA	This product is exempt from the inventory requirements of the U.S. Toxic Substances Control Act (TSCA).
SARA 313	Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.
CERCLA	This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.
Clean Air Act, Sec. 112	This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.
Clean Water Act	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)
California Proposition 65	This product is not subject to warning labeling under California Proposition 65.

SECTION 16 OTHER INFORMATION

ABBREVIATIONS

~	Approximately
<	Less than
>	Greater than
≤	Less than or equal to
CERCLA	The Comprehensive Environmental Response, Compensation, and Liability Act
EPA	Environmental Protection Agency
HMIS	Hazardous Materials Information System
GHS	The Globally Harmonized System of Classification and Labelling of Chemicals
IARC	International Agency for Research on Cancer
NA	Not Applicable
NDA	No Data Available
NFPA	National Fire Protection Association
NI	Not Indicated
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PPE	Personal Protection Equipment
SDS	Safety Data Sheet
TSCA	Toxic Substances Control Act



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SECTION 16 (continued)

PERSONAL PROTECTION INDEX	
A	G
B	H
C	I
D	J
E	K
F	X Consult your supervisor or S.O.P. for "SPECIAL" handling directions

SDS Prepared By	The Clean Environment Co.
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Disclaimer:

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End of Safety Data Sheet