

Issue Date: 08-Aug-2011

Revision Date: 27-Feb-2014

Version 1.0

1. IDENTIFICATION

Product Identifier

Product Name Lime Remover

Other Means of Identification

Product Code 271500

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Lime remover. For industrial use.

Details of the Supplier of the Safety Data Sheet

Midlab, Inc.
140 Private Brand Way
Athens, TN 37303

Emergency Telephone Number

Company Phone Number Phone: 1-423-337-3180
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance White

Physical State Powder

Odor None

Classification

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2 Sub-category A

Signal Word

Warning

Hazard Statements

Causes skin irritation.
Causes serious eye irritation.



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves and eye protection/face protection.

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation persists: Get medical advice/attention.
Specific treatment: Remove from exposure and treat symptoms.

Precautionary Statements - Storage

No other specific measures identified.

Precautionary Statements - Disposal

No other specific measures identified.

Hazards Not Otherwise Classified (HNOC)

None known.

Unknown Acute Toxicity

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Citric Acid	77-92-9	60-100
Monosodium Phosphate	7558-80-7	10-30

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES**First Aid Measures**

Eye Contact	Exposure may cause irritation and redness. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
Skin Contact	Prolonged or repeated exposure may dry skin and cause irritation. Flush skin with water for 15 minutes. If irritation or rash persists, get medical attention.
Inhalation	If breathing becomes difficult, remove victim to fresh air. Call a physician if you feel unwell.
Ingestion	Rinse mouth and drink plenty of water. Do NOT induce vomiting unless directed to do so by a qualified medical personnel. Never give anything by mouth to an unconscious person. If any discomfort persists, obtain medical attention.

Most Important Symptoms and Effects

Symptoms	Contact with eyes may cause irritation and redness. Prolonged or repeated contact may dry skin and cause irritation. Repeated contact may cause allergic reactions in very susceptible persons.
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Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**Water spray (fog). Carbon dioxide (CO₂). Dry chemical. Foam.**Unsuitable Extinguishing Media**

Not determined.

Specific Hazards Arising from the Chemical

Oxides of sodium and phosphorus.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment and Emergency Procedures**

Personal Precautions	Use personal protection recommended in Section 8.
Environmental Precautions	Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	Collect in a clean, dry waste container for disposal. Dispose of in accordance with federal, state and local regulations. Use a water rinse for final clean up.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling	Wash thoroughly after handling. Use personal protection recommended in Section 8. Avoid breathing dust or fume. Use only in well-ventilated areas. Avoid contact with eyes and skin. Handle in accordance with good industrial hygiene and safety practice.
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Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep from freezing.
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Incompatible Materials	None known.
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Citric Acid 77-92-9	5mg/m ³	5mg/m ³	-
Monosodium Phosphate 7758-80-7	TWA: 10mg/m ³ (inhalable particles) TWA: 3 mg/m ³ (respirable particles)	TWA: 15 mg/m ³ (Total dust) TWA: 5 mg/m ³ (respirable fraction)	-

Appropriate Engineering Controls

Engineering Controls	General ventilation sufficient.
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Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection	Eye protection should be worn when splashing may occur.
Skin and Body Protection	Wear suitable gloves when handling this product.
Respiratory Protection	No protective equipment is needed under normal use conditions.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Powder	Odor	None
Appearance	White	Odor Threshold	Not determined
Color	White		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH (1%)	2.5-3.0	(1% solution)
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not determined	
Flash Point	None (not flammable)	Tag Open Cup
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not flammable	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	

Vapor Pressure	Not determined
Vapor Density	Not determined
Specific Gravity	Not Applicable
Water Solubility	Moderate in water @ 25°C
Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Auto-ignition Temperature	Not determined
Decomposition Temperature	Not determined
Kinematic Viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children. Avoid concentrated acids, bases, heavy metal salts, flammable materials, combustible materials, and moisture.

Incompatible Materials

Oxidizing agents, bases, reducing agents, and nitrates

Hazardous Decomposition Products

Thermal decomposition may result in the formation of oxides of carbon, sodium and phosphorus.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact	Causes eye irritation.
Skin Contact	May cause skin irritation or rash.
Inhalation	Avoid breathing dust.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Citric Acid 77-92-9	> 5000mg/kg (Rat)	> 2000mg/kg (Rat)	-
Monosodium Phosphate 7758-80-7	= 8290 mg/kg (Rat)	-	-

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

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

Numerical Measures of Toxicity
Not determined

Unknown Acute Toxicity None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Citric Acid 77-92-9	-	440-706mg/L (Goldfish 96hr)	-	-

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Not determined

US Federal Regulations

CERCLA

None listed.

SARA 311/312 Hazard Categories

Acute Health Hazard

Yes

SARA 313

Not determined

US State Regulations

U.S. State Right-to-Know Regulations

The following ingredients appear on various state right to know lists and/or California's Proposition 65 list:

Chemical Name	State List
Citric Acid 77-92-9	NJ, PA

- | | |
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| AZ- Arizona Ambient Air Quality Guidelines | IL- Illinois Toxic Air Contaminate- Carcinogenic |
| CT- Connecticut Hazardous Air Pollutants | MA- Massachusetts Right to Know List |
| CA- California Director's List of Hazardous Substances | MN- Minnesota Hazardous Substances List |
| CAP65- California Prop65 | NJ- New Jersey Right to Know List |
| FL- Florida Substances List | PA- Pennsylvania Right to Know List |
| ID- Idaho Non-Carcinogen Toxic Air Pollutants | RI- Rhode Island Hazardous Substances List |

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	Not determined	Not determined	Not determined	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	2	0	0	Not determined

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Keep Out of Reach of Children. For Industrial and Institutional Use Only.

*Denotes changes from last version.

End of Safety Data Sheet