

Lime Remover Plus

SECTION 1. IDENTIFICATION

Product Identifier	Lime Remover Plus
Other Means of Identification	6622
Other Identification	UN3264
Recommended Use	Lime Scale Remover.
Restrictions on Use	No information available.
Manufacturer/Supplier Identifier	Sunburst Chemicals, Inc., 220 W. 86th St., Bloomington, MN, 55420, 952-884-3144
Emergency Phone No.	Emergency Telephone Number, 1-866-303-6943
SDS No.	0005

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Classification

Acute toxicity (Oral) - Category 4; Acute toxicity (Dermal) - Category 4; Skin corrosion - Category 1B; Serious eye damage - Category 1

Label Elements



Signal Word:
Danger

Hazard Statement(s):

Harmful if swallowed or in contact with skin.
Causes severe skin burns and eye damage.

Precautionary Statement(s):

Prevention:

Wear protective gloves/protective clothing/eye protection/face protection.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash hands and skin thoroughly after handling.

General advice

Immediately call a POISON CENTRE or doctor.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTRE or doctor.

Skin

IF ON SKIN: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage:

Store locked up.
Store in a well-ventilated place. Keep container tightly closed.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

Not applicable.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers	Other Names
water	7732-18-5	50-75		
Phosphoric acid	7664-38-2	10-30		
Nitric acid	7697-37-2	1-10		
COPPER(II) SULFATE, PENTAHYDRATE	7758-99-8	0-0.2		

Notes

PRODUCT AT USE DILUTION

Contains ingredients listed above at weight % less than 0.1%

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely. Seek immediate medical attention/advice.

Eye Contact

Product Identifier: Lime Remover Plus - Ver. 5

Date of Preparation:

Date of Last Revision: November 12, 2019

Page 02 of 08

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Seek immediate medical attention/advice.

Ingestion

Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

First-aid Comments

Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

None known.

Immediate Medical Attention and Special Treatment

Special Instructions

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Water. Carbon dioxide (CO₂). Dry chemical.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Not sensitive to static discharge.

Not sensitive to mechanical impact.

Special Protective Equipment and Precautions for Fire-fighters

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

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions

Avoid release to the environment. Collect spillage. See Section 12 for additional Ecological Information. Dispose of contents/container to an approved waste disposal plant.

Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product.

Collect and reuse if possible. Following product recovery, flush area with water.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Do not eat, drink or smoke when using this product, or its use solutions.

Conditions for Safe Storage

Keep container tightly closed. Keep container closed when not in use. Keep out of the reach of children.

Product Identifier: Lime Remover Plus - Ver. 5

Date of Preparation:

Date of Last Revision: November 12, 2019

Page 03 of 08

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Phosphoric acid	1 mg/m ³	3 mg/m ³	1 mg/m ³			
Nitric acid	2 ppm	4 ppm	2 ppm			

Appropriate Engineering Controls

Provide eyewash and safety shower if contact or splash hazard exists. Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Rubber or vinyl gloves recommended when handling solid chemicals or their use solutions.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Green.
Odour	Odourless
Odour Threshold	Not available
pH	0.5 - 1.5
Melting Point/Freezing Point	Not available (melting); Not applicable (freezing)
Initial Boiling Point/Range	100 °C (212 °F)
Flash Point	Not available
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	Not applicable (upper); Not applicable (lower)
Vapour Pressure	Not applicable
Vapour Density (air = 1)	Not applicable
Relative Density (water = 1)	Not available
Solubility	Soluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not applicable
Auto-ignition Temperature	Not applicable
Decomposition Temperature	Not available
Viscosity	Not applicable (kinematic); Not applicable (dynamic)
Other Information	
Physical State	Liquid
Use Dilution	Use dilution pH is 0.5 - 2.0 pH
VOC Content	VOC Content (%) = 0%

SECTION 10. STABILITY AND REACTIVITY

Product Identifier: Lime Remover Plus - Ver. 5
Date of Preparation:
Date of Last Revision: November 12, 2019

Reactivity

None known.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

None known.

Incompatible Materials

Chlorine-based bleaching agents.

Hazardous Decomposition Products

None known.

SECTION 11. TOXICOLOGICAL INFORMATION**Likely Routes of Exposure**

Eye contact; skin contact.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Phosphoric acid	Not available	1410 mg/kg (rat)	Not available
Nitric acid	130 mg/m3 (rat) (4-hour exposure)	Not available	Not available

LC50: No information was located.

LD50 (oral): No information was located.

LD50 (dermal): No information was located.

Skin Corrosion/Irritation

Skin contact with corrosive substances can cause skin burns.

Serious Eye Damage/Irritation

Causes serious eye damage.

STOT (Specific Target Organ Toxicity) - Single Exposure**Inhalation**

Avoid breathing vapours or mists. May be harmful by inhalation.

Ingestion

Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information available.

Respiratory and/or Skin Sensitization

No information available.

Carcinogenicity

A5 – Not suspected as a human carcinogen.

Reproductive Toxicity**Development of Offspring**

No information was located.

Sexual Function and Fertility

Product Identifier: Lime Remover Plus - Ver. 5

Date of Preparation:

Date of Last Revision: November 12, 2019

Page 05 of 08

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

Not mutagenic.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful, with long lasting effects to aquatic life, based on acute toxicity tests.

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Phosphoric acid	3.0-3.5 mg/L (96-hour)	4.6 mg/L (Daphnia magna (water flea); 12-hour)	Not available	Not available
Nitric acid	72 mg/L (96-hour)	Not available	Not available	Not available

Persistence and Degradability

No information available.

Bioaccumulative Potential

No information available.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	UN3264	Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid)	8	II
IMDG/IMO	UN3264	Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid)	8	II

Environmental Hazards Not applicable

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Emergency Response Guide No. 154

Product Identifier: Lime Remover Plus - Ver. 5

Date of Preparation:

Date of Last Revision: November 12, 2019

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

Additional USA Regulatory Lists

SARA Title III - Section 313:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Nitric acid	7697-37-2	1 - 10	1.0

SARA Title III - Section 311/312:

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

California Proposition 65

This product contains no Proposition 65 chemicals.

U.S. EPA Label Information

EPA Registration Number : Not applicable.

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

CWA - Hazardous Substances :. (Phosphoric acid)

CWA - Hazardous Substances :. (Nitric acid)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Hazardous Substances RQs:

Phosphoric acid 5000 lb final RQ/ RQ 2270 kg final RQ

Nitric acid 1000 lb final RQ/ RQ 454 kg final RQ

U.S. State Right-to-Know Regulations

Massachusetts Right To Know:. (Phosphoric acid)

New Jersey Right To Know:. (Phosphoric acid)

Pennsylvania Right To Know:. (Phosphoric acid)

Rhode Island:. (Phosphoric acid)

Massachusetts Right To Know:. (Nitric acid)

New Jersey Right To Know:. (Nitric acid)

Pennsylvania Right To Know:. (Nitric acid)

Illinois Right to Know:. (Nitric acid)

Rhode Island:. (Nitric acid)

Product Identifier: Lime Remover Plus - Ver. 5

Date of Preparation:

Date of Last Revision: November 12, 2019

Page 07 of 08

SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 3** **Flammability - 0** **Instability - 0**
SDS Prepared By Sunburst Chemicals.
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Product Identifier: Lime Remover Plus - Ver. 5
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Date of Last Revision: November 12, 2019

Page 08 of 08