

SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION & COMPANY INFORMATION

PRODUCT: Lime Remover
ITEM: CH1740201
RECOMMENDED USE: Scale and Mineral Deposit Remover

DATE ISSUED :	12/17/2015
SDS REF. No :	402

SUPPLIER:
Chem Mark of Long Beach
8210 Electric Ave.
Stanton, CA 90680

24 HR. EMERGENCY TELEPHONE NUMBER:
INFOTRAC (US Transportation): (800) 535-5053
NON-EMERGENCY TELEPHONE NUMBER:
(714) 220-2436

2. HAZARDS INGREDIENTS & IDENTIFICATION

GHS CLASSIFICATION:

Skin Corrosion Category 1A
Serious eye damage Category 1

GHS LABEL ELEMENT

Hazard Pictograms



SIGNAL WORD: DANGER

HAZARD STATEMENTS: Causes severe skin burns and eye damage.

PREVENTION:

Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

RESPONSE:

IF SWALLOWED: Do Not induce vomiting. Rinse mouth. Immediately drink 1 to 2 glasses of water or milk. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

If in EYES: In case of contact, immediately flush thoroughly with plenty of cool running water. Remove contact lenses if worn. Continue flushing for at least 15 minutes holding eyelids apart. If irritation persists, get medical attention promptly.

IF on SKIN (or HAIR): In case of contact, immediately flush thoroughly with plenty of cool running water for at least 15 minutes. Immediately remove contaminated clothing and shoes. Wash prior to reuse.

IF INHALED: If discomfort is experienced from exposure to spray mist, the person should employ respiratory protection or leave the contaminated area until proper ventilation is restored. Breathe fresh air. If irritation persists, get medical attention.

STORAGE: Store in a tightly closed container. Do not store near oxidizers, alkalies, acids and bleach. Do not mix with other chemicals. Store away from excessive heat.

DISPOSAL METHOD: Dispose of in accordance with all Local, State and Federal regulations.

EMPTY CONTAINER: Nonrefillable container. Do not reuse or refill container. Before discarding container, rinse thoroughly with water.

OTHER HAZARDS: None known.

3. PHYSICAL DATA/COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS Number	OSHA PEL	ACGIH TLV
Hydrochloric Acid	7647-01-0	5mg/m7	5mg/m7

4. HEALTH HAZARD DATA & FIRST AID MEASURES

EYES : Immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eyes and lids with water. DO NOT attempt to neutralize with chemical agents. Obtain medical attention as soon as possible. Oils or ointments should not be used. Continue the flushing for an additional 15 minutes if the physician is not immediately available.

SKIN : Immediately remove contaminated clothing under safety shower. Flush all affected areas with large amounts of water for at least 15 minutes. DO NOT attempt to neutralize with chemical agents. Obtain medical advice immediately.

INGESTION : If swallowed, DO NOT INDUCE VOMITING. Immediately give large quantities of water or milk, if available. If vomiting does occur, give fluids again. Never give anything by mouth to an unconscious person. Call a physician or nearest Poison Control Center immediately.

INHALATION : Remove from contaminated atmosphere. If breathing has ceased, clear the victim's airway and start mouth-to-mouth artificial respiration, which may be supplemented by the use of a bag-mask respirator, or a manually-triggered, oxygen supply capable of delivering 1 liter/second or more. If the victim is breathing, oxygen may be administered from a demand-type or continuous-flow inhalator, preferably with a physician's advice. Contact a physician immediately.

EYES : Immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eyes and lids with water. DO NOT attempt to neutralize with chemical agents. Obtain

medical attention as soon as possible. Oils or ointments should not be used. Continue the flushing for an additional 15 minutes if the physician is not immediately available.
NOTES TO PHYSICIAN: Treat symptomatically.

5. FIRE FIGHTING & EXPLOSION DATA/MEASURES

SUITABLE EXTENGUISHING MEDIA: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water, Carbon Dioxide, Dry Chemical, Foam.
UNSUITABLE EXTENGUISHING MEDIA: None Known
SPECIFIC HAZARDS DURING FIRE FIGHTING: Not flammable or combustible.
HAZARDOUS COMBUSTION PRODUCTS: Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus
FIRE FIGHTING EQUIPMENT : Use Self Contained Breathing Apparatus (SCBA) or NIOSH approved respirator and protective clothing.
FIRE FIGHTING PROCEDURES : Avoid breathing of vapors. Apply water spray to cool fire exposed containers and structures. Use water spray to disperse vapors.
GENERAL HAZARD : If material is released, area will become slippery.
FLASH POINT AND METHOD : None
FLAMMABLE LIMITS : None
AUTOIGNITION TEMPERATURE : N/A
FLAMMABLE CLASS : N/A
OTHER CONSIDERATIONS : None

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PRODCDURES: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: To contain spilled material, dike area involved. Neutralize with soda ash(sodium carbonate), lime (calcium hydroxide) or limestone (calcium carbonate). To absorb product, use porous material such as diatomaceous earth, sand or a commercial absorbent. Using a shovel, place into leak proof containers.
ENVIRONMENTAL PRECAUTIONS: Do not allow contact with soil, surface or ground water.

7. PRECAUTIONS FOR SAFE HANDLING/STORAGE/USE

SAFE HANDLING: Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling.
GENERAL PROCEDURES : Store in a tightly closed container. Do not store near oxidizers, alkalies, acids and bleach. Do not mix with other chemicals. Store away from excessive heat.
 Do not freeze. Keep away from food stuffs. Keep out of reach of children.
STORAGE TEMPERATURE: 0 °C to 50 °C

8. EXPOSURE CONTROLS\PERSONAL PROTECTION (PPE)

INGREDIENTS WITH WORKPLACE CONTROL PARAMETERS

Hazardous Components	CAS Number	Form of Exposure	Permissible Concentration
Hydrochloric Acid	7647-01-0	Ceiling	5mg/m7

OSHA TABLE COMMENTS: NL = Not Listed
ENGINEERING CONTROLS: Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

PERSONAL PROTECTIVE EQUIPMENT:
EYES AND FACE: Safety Splash Monogoggles / Face Shield.
SKIN: Solvent resistant gloves, boots and clothing.
RESPIRATORY: None needed for normal clean up. If mist or vapor may be generated, a Self Contained Breathing Apparatus (SCBA) or NIOSH approved respirator is advised.
WORK HYGIENIC PRACTICES: Avoid accidental spills on skin, wash after use. Wash contaminated clothing prior to reuse.
OTHER USE PRECAUTIONS: Have clean water available for washing. Provide adequate ventilation or use mechanical devices.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPERANCE/PHYSICAL STATE: Liquid
COLOR: White Emulsion
ODOR: Strong, Pungent
pH: 1.0
FLASH POINT: None
ODOR THRESHOLD: No Data Available
MELTING POINT/FREEZING POINT: No Data Available
BOILING POINT: >212°F
EVAPORATION RATE: (Water=1): <1 (slower than water)
FLAMMABILITY (SOLID, GAS): No Data Available
UPPER EXPLOSION LIMIT: No Data Available
SPECIFIC GRAVITY: (H₂O=1): 1.12

LOWER EXPLOSION LIMIT:	No Data Available
VAPOR PRESSURE:	No Data Available
RELATIVE VAPOR DENSITY:	(Air=1): >1 (heavier than air)
RELATIVE DENSITY:	No Data Available
WATER SOLUBILITY:	100%
SOLUBILITY IN OTHER SOLVENTS:	No Data Available
PARTITION COEFFICIENT: N-OCTANOL/WATER:	No Data Available
AUTOIGNITION TEMPERATURE:	No Data Available
THERMAL DECOMPOSITION:	No Data Available
VISCOSITY, KINEMATIC:	No Data Available
EXPLOSIVE PROPERTIES:	No Data Available
OXIDIZING PROPERTIES:	No Data Available
MOLECULAR WEIGHT:	No Data Available
VOC:	No Data Available

10. STABILITY AND REACTIVITY

STABILITY : Stable
HAZARDOUS POLYMERIZATION : Will NOT Occur
CONDITIONS TO AVOID : Contact with aluminum and soft metals. Keep from freezing.
POLYMERIZATION : Will NOT Occur
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride gas, hydrogen gas, nitrogen chlorine gas, CO, CO2
INCOMPATIBLE MATERIALS : Acids, oxidizers and strong alkalis, bleach and ammonia.
 Soft metals such as aluminum, zinc and tin.

11. TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE: Inhalation, Eye contact, Skin contact.

POTENTIAL HEALTH EFFECTS:

EYES:	Causes serious eye damage.
SKIN:	Causes severe skin burns.
INGESTION:	Causes digestive tract burns.
INHALATION:	May cause nose, throat, and lung irritation.
CHRONIC EXPOSURE:	Health injuries are not known or expected under normal use.

EXPERIENCE WITH HUMAN EXPOSURE:

EYE CONTACT:	Redness, Pain, Corrosion
SKIN CONTACT:	Redness, Pain, Corrosion
INGESTION:	Corrosion, Abdominal pain
INHALATION:	Respiratory irritation, Cough

TOXICITY

ACUTE ORAL TOXICITY:	Acute toxicity estimate: > 5,000 mg/kg
ACUTE INHALATION TOXICITY:	No Data Available
ACUTE DERMAL TOXICITY:	No Data Available
SKIN CORROSION/IRRITATION:	No Data Available
SERIOUS EYE DAMAGE/EYE IRRITATION:	No Data Available
RESPIRATORY OR SKIN SENSITIZATION:	No Data Available
CARCINOGENICITY:	No Data Available
REPRODUCTIVE EFFECTS:	No Data Available
GERM CELL MUTAGENICITY:	No Data Available
TERATOGENICITY:	No Data Available
STOT-SINGLE EXPOSURE:	No Data Available
STOT-REPEATED EXPOSURE:	No Data Available
ASPIRATION TOXICITY:	No Data Available
GENERAL COMMENTS:	No Data Available

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: This product has no known ecotoxicological effects. Non Identified

PRODUCT

TOXICITY TO FISH:
 No Data Available
TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES:
 No Data Available
TOXICITY TO ALGAE:
 No Data Available

INGREDIENTS

TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES:
 Hydrochloric Acid
PERSISTENCE AND DEGRADABILITY:
 No Data Available

BIOACCUMULATIVE POTENTIAL:

No Data Available

MOBILITY IN SOIL:

No Data Available

OTHER ADVERSE EFFECTS:

No Data Available

13. DISPOSAL CONSIDERATIONS**DISPOSAL METHOD:** Dispose of in accordance with all Local, State and Federal regulations.**EMPTY CONTAINER:** Nonrefillable container. Do not reuse or refill container. Before discarding container, rinse thoroughly with water.**RCRA/EPA WASTE INFORMATION:** N/A**14. TRANSPORT INFORMATION****THE SHIPPER/CONSIGNOR/SENDER IS RESPONSIBLE TO ENSURE THAT THE PACKAGING, LABELING, AND MARKINGS ARE IN COMPLIANCE WITH THE SELECTED MODE OF TRANSPORT.****DOT (DEPARTMENT OF TRANSPORTATION)**LAND TRANSPORT:**PACKAGE SIZE:** 1-Quart or Less

DOT DESCRIPTION: Compounds, Cleaning Liquid

DOT LABEL: None

DOT PLACARD: None

PACKAGE SIZE: 1-Gallon or Larger

NA NUMBER: NA 1760

NA PROPER SHIPPING NAME : Compounds, Cleaning Liquid

(contains hydrochloric acid).

TRANSPORT HAZARD CLASS: Corrosive 8

TRANSPORT HAZARD SUBCLASS: N/A

PACKING GROUP: PG II

DOT LABEL: Corrosive 8

DOT PLACARD: Corrosive 8 (1001 Lbs. or More)

MARINE POLLUTANT Y/N: No

SEA TRANSPORT (IMDG/IMO):**PACKAGE SIZE:** 1-Quart or Less

DOT DESCRIPTION: Compounds, Cleaning Liquid

DOT LABEL: None

DOT PLACARD: None

PACKAGE SIZE: 1-Gallon or Larger

NA NUMBER: NA 1760

NA PROPER SHIPPING NAME : Compounds, Cleaning Liquid

(contains hydrochloric acid).

TRANSPORT HAZARD CLASS: Corrosive 8

TRANSPORT HAZARD SUBCLASS: N/A

PACKING GROUP: PG II

DOT LABEL: Corrosive 8

DOT PLACARD: Corrosive 8 (1001 Lbs. or More)

MARINE POLLUTANT Y/N: No

15. REGULATORY INFORMATION**EPCRA – EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW
CERCLA REPORTABLE QUANTITY**

Hazardous Components	CAS Number	Component RQ (Lbs.)	Calculated Component RQ (lbs.)
Hydrochloric Acid	7647-01-0	1,000	22,222

UNITED STATES:**SARA (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****SARA 304 EXTREMELY HAZARDOUS SUBSTANCES REPORTABLE QUANTITY:**

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards:

Acute Health Hazard

SARA 302:

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313:

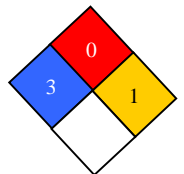
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

CALIFORNIA PROP 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

HMIS RATING	
Health :	3 HMISH
Flammability :	0 HMISF
Reactivity :	1 HMISR
Personal Protection :	HMISP

NFPA

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