

SAFETY DATA SHEET

This SDS Complies With 29 CFR 1910.1200 (The Hazard Communication Standard)

Section I - Product & Company Identification

Product identifier

Product name : EHC-UC LIME, RUST & SCALE REMOVER

Product form: Liquid

Relevant identified uses of the substance or mixture: Liquid Acid Detergent

Details of the supplier of the safety data sheet

Distributor:

Enviro-Health Corp., 1608 SW MacVicar, Ave Topeka, KS 66604

Phone: 1-800-314-3862

Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300

Section II – Hazards Identification

Classification

Corrosion to metals Category 1

Acute Toxicity, Oral Category 5

Acute toxicity, Inhalation Category 4

Serious eye damage/eye irritation Category 1

Skin corrosion/ irritation Category 1

Specific target organ toxicity – single exposure (Category 3), Respiratory tract irritation

Pictogram



Signal Word

Danger

Hazard Statements

May be corrosive to metals

Causes severe skin burns and eye damage..

Harmful if inhaled.

May be harmful if swallowed.

May cause respiratory irritation.

Precautionary Statements – Prevention

Keep only in original container.
Avoid breathing fume/mist/vapors/spray.
Use only outdoors or in a well ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection
Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements – Response

Absorb spillage to prevent material damage. 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 CENTER or doctor/physician.
IF ON SKIN: Immediately take off contaminated clothing and wash before reuse.
Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth
IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary Statements - Storage

Store in a well ventilated place, Keep container tightly closed keep cool. Store locked up.
Store in a corrosion resistant container.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Section III –Composition/Information on ingredients

Mixture

Name	Product identifier	Weight %
Hydrochloric Acid	(CAS No) 7647-01-0	20-30

Any concentration shown as a range is to protect confidentiality or is due to process variation.

Section IV – First Aid Measures

First Aid Measures

Inhalation: Remove to fresh air. If breathing stops, provide artificial respiration. If symptoms persist, call a physician.

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately get medical attention.

Ingestion: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact: Remove contaminated clothing, wash with plenty of water. If skin irritation persists, call a physician.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms

May cause serious eye and skin burns, pain and severe corrosive skin damage. May include stinging, tearing, redness, swelling and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Coughing.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians: Treat symptomatically.

Section V – Fire Fighting Measures

Suitable Extinguishing Media

Water spray, alcohol resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media Do not use water jet as it will spread the fire.

Specific Hazards Arising from the Chemical

Hazardous gases may be formed.

Protective Equipment and Precautions for Firefighters

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

Section VI –Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions: Keep unnecessary personnel away and upwind of spill/leak.. Use personal protective equipment as required. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Methods and Material for Containment and Cleaning Up

Methods for Containment: Prevent further leakage or spillage if safe to do so. Prevent discharge to the environment. Dike the spilled material, where this is possible.

Methods for Cleaning Up: Use non-combustible material like vermiculite, sand or earth to soak up the product and place into a suitable container for later disposal.

Section VII – Handling & Storage

Precautions for Safe Handling

Advice on Safe Handling: Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use personal protection recommended in Section 8.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place.

Section VIII – Exposure Controls/ Personal Protection

Exposure Guidelines

Chemical Name	CAS #	ACGIH TLV	OSHA PEL	NIOSH
Hydrochloric Acid	7647-01-0	Ceiling 2 ppm	Ceiling 5 ppm 7 mg/m3	Ceiling 5 ppm 7 mg/m3

Appropriate Engineering Controls

Engineering Controls: Provide adequate ventilation, (typically 10 air changes per hour). Eye wash stations and emergency shower must be available when handling this product..

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection: Wear approved safety goggles and face shield.

Skin and Body Protection: Wear suitable chemical resistant protective gloves and clothing.

Respiratory Protection: Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice.

Section IX – Physical & Chemical Properties

Information on Basic Physical and Chemical Properties

Physical State	Liquid
Color	Blue
<u>Property</u>	<u>Values</u>
pH	< 1
Melting Point/Freezing Point	No data available
Boiling Point/Boiling Range	100-110 ° C (212-230 ° F)
Flash Point	No data available
Evaporation Rate	No data available
Flammability (Solid,Gas)	n/a-liquid
Upper Flammable Limits	No data available
Lower Flammable Limits	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	1.11
Water Solubility	Soluble in Water
Solubility in Other Solvents	No data available
Partition Coefficient	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Kinematic Viscosity	No data available
Dynamic Viscosity	No data available
Explosive Properties	Not an Explosive
Oxidizing Properties	No data available
Odor	Strong pungent
Odor Threshold	No data available

Section X – Stability & Reactivity

Reactivity

Reacts violently with strong alkaline substances. May react with reducing agents.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

Do not mix with other chemicals. Avoid contact with incompatible materials.

Incompatible Materials

Water, bases, oxidizing agents, reducing agents, metals, amines, alkalies, organic compounds..

Hazardous Decomposition Products

Hydrogen Chloride gas.

Section XI - Toxicological information

Information on Likely Routes of Exposure

Product Information

Inhalation: Avoid breathing vapors or mists.

Eye Contact: Causes severe eye damage

Skin Contact: Causes severe skin corrosion. Avoid contact with skin.

Ingestion: May be harmful if swallowed.

This product as a whole has not been tested for acute toxicity; the following is based on component data:

Chemical Name	CAS #	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric Acid	7647-01-0	900 mg/kg (Rabbit)	1449 mg/kg (Mouse)	1108 ppm, 1 h (Mouse) 3124 ppm, 1 h (Rat)

Chemical Name	Hydrochloric Acid
Skin corrosion/irritation	Causes severe skin burns and eye damage
Serious eye damage/irritation	Causes serious eye damage.
Respiratory or skin sensitization	Not a respiratory or skin sensitizer
Mutagenicity	No data available
Carcinogenicity	Not considered a carcinogen.
Reproductive toxicity	Not expected to cause reproductive effects.
Specific target organ toxicity-Single exposure	May cause respiratory irritation.
Specific target organ toxicity-repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.

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

Section XII - Ecological information

Ecotoxicity

There is no data available for this product as a whole.

Chemical Name	CAS #	Algae/aquatic plants	Fish	Aquatic invertebrates
Hydrochloric Acid	7647-01-0	No data available	Western mosquitofish (Gambusia affinis) 282 mg/l, 96 h	No data available

Persistence and Degradability

No data available

Bioaccumulation

No data available

Mobility

No data available

Section XIII - Disposal considerations

Waste Disposal Method

Dispose of material in accordance with all Federal, State and local regulations. Local regulations may be more stringent than Federal or State. Avoid discharge to sewers or waterways.

Section XIV - Transport information

DOT Proper Shipping Description:

Bulk & Non-Bulk: UN1789, Hydrochloric Acid Solution, 8, PG II

Section XV - Regulatory information

SARA Title III Section 311/312 (40CFR370): Acute and chronic health hazard

SARA Title III Section 313 (40CFR372): Hydrochloric acid.

RCRA Status (40CFR261.33): No reportable components.

TSCA Inventory Status: Reported/included

OSHA/NTP/IARC Carcinogen Status: Not listed

Canadian DSL Status: reported/included

Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity:

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Hydrochloric Acid	X	X	X

Section XVI - Other information

HMIS ratings: Health: 3
 Flammability: 0
 Reactivity: 1

Indication of changes: Revision – 2 Classification updates.

Date Sheet Prepared: 01/05/2018 Other information: Author – EHS Administrator

The information herein is presented in good faith and believed to be correct as of the date hereof. However, the manufacturer makes no representation as to the completeness and accuracy thereof. Users must make their own determination as to the suitability of the product for their purposes prior to use.

No representations or warranty's, either express or implied of merchantability, fitness for a particular purpose or of any other nature with respect to the product or to the information herein is made hereunder. The manufacturer shall in no event be responsible for any damages of whatsoever nature directly or indirectly resulting from the publication or use of or reliance upon information contained herein.

END OF SDS