

SAFETY DATA SHEET

Product Name *Descaling Liquid*

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: *Descaling liquid*
Recommended use: **Removing scale from mineral surfaces**
Company Details: **Envirochem International (NZ) Ltd**
Address: 41 Angle Street, Onehunga
Auckland. New Zealand
Telephone Number: +64 9 262 0800
Emergency Telephone Number: National Poison Information Centre 0800 764 766
Date of Preparation: 01/06/2017

2. HAZARD IDENTIFICATION



DANGER

HSNO Hazard Classification: 6.1B, 8.1A, 8.2B, 8.3A, 9.1D, 9.3C

Hazard Statement:

May be corrosive to metal
Causes severe skin burns and eye damage
Fatal if Inhaled

Prevention Statements:

- Keep out of reach of children
- Read label before use
- Read Safety Data Sheet before use.
- Keep in original container
- Do not breath dust/fume/gas/mist/vapours/spray
- Wash hand thoroughly after handling
- Use only outdoor or in a well-ventilated area.
- Avoid release into environment
- Use personal protective equipment as required
- Wear respiratory protection

Response Statement:

- If medical advice is needed, have product container or label at hand.
- Immediately call a POISON CENTRE or doctor/physician.
- Do NOT induce vomiting.
- Wash contaminated clothing before use
- Absorb spillage to prevent material damage
- IF SWALLOWED: Rinse mouth DO NOT induce vomiting
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

- IF INHALED: remove to fresh air and keep at rest in a position comfortable for breathing
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do, continue rinsing

Storage Statement:

- Store locked up
- Store in a corrosive resistant container with a resistant inner lining.
- Store in a well-ventilated place. Keep container tightly closed.

Disposal

- Disposal should be through qualified contractor.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS #	Concentration %
Hydrochloric Acid	7647-01-0	>50.0
Surfactants		1.0-10.0
Water	7732-18-5	Balance

4. FIRST AID MEASURES

Ingestion:

Immediately rinse mouth with water. If swallowed do not induce vomiting. Give water to drink. Never give anything by mouth to an unconscious person. Seek immediate medical aid immediately.

Eye Contact:

Immediately flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Transport to the nearest medical facility for additional treatment. Do not rub eyes or keep eyes closed

Skin Contact:

Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.

Inhalation:

Remove the effected person out to a ventilated area. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

5. FIRE FIGHTING MEASURE

Extinguishing Media:

Use dry chemical powder, foam, polymer foam, and water spray or fog type extinguishers. Water may be ineffective on fire. However, water spray may be used to extinguish fires and to absorb heat. Keep containers cool and protect exposed material. If a leak or spill has not ignited, water spray may be used to flush spills away from exposures.

Hazards from combustion products:

Not combustible. However, can liberate highly flammable hydrogen gas when in contact with certain metals

Precautions for fire fighters and special protective equipment:

Alert fire brigade and tell them location and nature of hazard.

- Wear breathing apparatus plus protective gloves
- Prevent, by any means available, spillage from entering drains or water courses

Use fire fighting procedure suitable for surrounding area.

Use water delivered as a fine spray to control the fire and cool adjacent area.

Fire fighters to wear self-contained breathing apparatus if risk of exposure to Vapour or products of combustion as well as structural fire fighter uniform.

6. ACCIDENTAL RELEASE MEASURES

Emergency Precautions:

Personnel involved in the clean up should wear full protective clothing. Evacuate all unnecessary personnel. Increase ventilation. Avoid walking through spilled product as it may slippery. Stop leak if safe to do so. Do not let product reach drain or waterways; advise the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment.

Methods and Materials for Containment and Clean Up:

Soak up spilled product using absorbent, non-combustible material such as sand or soil. Avoid using sawdust or cellulose. When saturated, collect material into suitable, labelled, dry, sealable containers and hold for safe disposal. Once pick-up is complete, flush spill site with plenty of water to eliminate any residue. Hold contaminated water for treatment/disposal.

7. HANDLING AND STORAGE

Handling:

Wash thoroughly after handling. Use only in a well ventilated area. Avoid contact with eyes, skin and clothing. Empty containers retain product and residue (liquid or vapour), and can be dangerous. Keep container tightly closed. Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Do not dispose of material to sewers or waterways. When diluting acid, always add slowly to water in small amounts and never use hot water. Adding water to acid solution can cause uncontrolled boiling and splashing.

Storage:

Store in a tightly closed container. Keep from contact with oxidizing agents. Store in cool, dry, well-ventilated area away from incompatible substances. Keep containers closed at all times, check regularly for leak.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards:

The Occupational Safety and Health Service, NZ Department of Labour have set no Tolerable Exposure Limit (TEL) Workplace Exposure Standards (WES) for this substance.

For hydrochloric acid: TWA = 5ppm Peak limitation (7.5mg/m³ Peak limitation)

Biological limit values:

None established

Engineering Controls:

The use of local exhaust ventilation is recommended to control process emissions near the source and keep employee exposures as low as possible. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion proof ventilation equipment

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory Protection:

Where concentration in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half face filter mask to protect from overexposure by inhalation with an acid gas filter according to NZS1715/1716.

Eye Protection:

Always use safety glasses or a face shield when handling this product.

Skin/Body Protection:

Always wear long sleeves and long trousers or coveralls, enclosed footwear or safety boots and chemical resistant gloves when manufacturing this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear light brown color
Physical State:	Liquid
Odour:	Pungent
pH:	<1
Solubility:	soluble in water
Vapour Density:	1.3 Air=1

Boiling point:	>100 deg
Freezing Point:	0 degree
Ignition Point:	Not available
Flash Point:	Not available
Specific Gravity:	1.5
Vapour pressure:	Not available
% Volatilities	Not available

10. STABILITY AND REACTIVITY

Chemical Stability:

Stable at room temperature and pressure

Conditions to avoid:

Do not combine part drums of the same product, as this may be source of contamination. Avoid excess heat.

Incompatible Materials:

Incompatible with Oxidising agents, alkalis, most metals, alcohols and amines.

Hazardous decomposition:

HCL can liberate highly flammable hydrogen gas when in contact with certain metals.

Hazardous reactions:

Reacts violently with alkalis. Reacts exothermically on dilution with water. Reacts with chlorine products and oxidizing agents liberating toxic gas. Corrosive to many metals with liberation of extremely flammable hydrogen gas.

11. TOXICOLOGICAL INFORMATION

Chronic Effects

Ingestion:

Ingestion of acidic corrosives may produce burn around and in the mouth, the throat and oesophagus.

Immediate pain and difficulties in swallowing and speaking may also be evident.

Eye Contact:

The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.

Skin Contact:

The material can produce chemical burns following direct contact with the skin. Skin contact with acidic corrosives may result in pain and burns; these may be deep with distinct edges and may heal slowly with the formation of scar tissue.

Inhalation:

Irritating to respiratory tract. Exposure to high concentrations over an extended period of time may result in muscle weakness, tingling in hands and feet, blurred vision, headaches, nausea, loss of appetite, hallucinations and possible loss of consciousness.

Chronic Effects

This product contains Sulphuric acid a confirmed toxicant to target organs and systems, and may cause cancer.

Other health effects information

Substance accumulation, in the human body may occur and may cause some concern following repeated or long-term occupational exposure. Repeated or prolonged exposure to acids may result in the erosion of teeth, swelling and ulceration of the mouth lining.

Toxicological information

Inhalation, Rat LC50: 4.2-4.7 mg/l/1h

12. ECOLOGICAL INFORMATION

Ecotoxicity:

LC50 Mosquito fish (female) 282 mg/L/24hr

LC50 Shore Crab 240 mg/L/48hr

LC50 Sand shrimp 260 mg/L/48hr

Persistence/ degradability: No information available.

Mobility: No data available for this product.

13. DISPOSAL CONSIDERATIONS

Disposal Methods:

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain fumes and vapours that are flammable and harmful.

Special precautions for landfill or incineration:

This product is not suitable for disposal by either landfill or via municipal sewers, drain, natural streams or rivers. This product is ash less and can be burned directly in appropriate equipment.

14. TRANSPORT INFORMATION

Road and Rail Transport:

Classified as Dangerous Goods by the criteria of New Zealand Dangerous Goods Code for transport by road and rail

Marine Transport:

Classified as Dangerous Goods by the criteria of international Maritime Dangerous Goods Code for transport by sea.

Air Transport:

Classified as Dangerous Goods by the criteria of international Air Association Dangerous Goods Regulations for transport by air



Shipping Name: Hydrochloric Acid
Hazard Class: 8
UN Number: UN 1789
Packing Group: II
Hazchem Code: 2R

15. REGULATORY INFORMATION

HSNO Approval No: HSR002526
Group Standard: Cleaning Products Corrosive Group Standard 2006
HSNO Classification: 6.1B, 8.1A, 8.2B, 8.3A, 9.1D, 9.3C

16. OTHER INFORMATION

New Zealand National Poison Information Centre: 0800 764 766
New Zealand Emergency Services: 111
Envirochem International (NZ) Ltd : +64 9 262 0800

Every endeavour has been made to ensure that the information contained in this publication is reliable and offered in good faith. It is meant to describe the safety requirements of our products and should not be construed as guaranteeing specific properties. Customers are encouraged to conduct their own tests as end user suitability of the product for particular uses is beyond our control. The information is not intended as an inducement to bargain and no warranty expressed or implied is made as to its accuracy, reliability or completeness. Envirochem International (NZ) Limited accepts no liability for loss, injury or damage arising from ENVIROCHEM INTERNATIONAL (NZ) LTD | www.envirochem.co.nz

reliance upon the information contained in this data sheet except in conjunction with the proper use of the product to which it refers. Due care should be taken that the use and disposal of this product is in compliance with appropriate Local Councils regulations.