

MATERIAL SAFETY DATA SHEET
PRODUCT: HYDROCHLORIC ACID
SOLD AS: AQUATIC ELEMENTS LIQUID ACID

Date of Issue: 28 May, 2021

STATEMENT OF HAZARDOUS NATURE

Classified as hazardous according to criteria of WorkSafe Australia

COMPANY DETAILS

Company: Aquatic Elements Pty Ltd
Address: 2 Hayter Street Currumbin Waters, QLD, 4223
Telephone: (07) 5534 3136
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PRODUCT IDENTIFICATION

Product Name: Hydrochloric Acid 33% w/w
Other Names: Muriatic Acid, Spirit of Salt
UN Number: 1789
DG Class: 8 (Corrosive)
Packing Group: 11
Hazchem Code: 2R
Poisons Schedule: S6
Use: Pickling and cleaning metal, boiler scale removal, brick cleaning and in swimming pools (pH control).

PHYSICAL DESCRIPTION AND PROPERTIES

Appearance: Clear to slightly yellow fuming liquid with a pungent Odour.
Boiling Point: 108.6°C
Vapour Pressure: 17.8mm Hg at 20°C
Specific Gravity: 1.16-1.18 at 20°C
Solubility in Water: Soluble in all proportions

COMPOSITION

<u>Chemical Name:</u>	<u>CAS No:</u>	<u>Proportion</u>
(Hydrochloric Acid w/w)	7647-01-0	33%
Water		67%

HEALTH HAZARD INFORMATION

Effects from Acute Exposure

- Swallowed:** Will cause severe burns to the mouth, throat and stomach resulting in vomiting, diarrhoea and abdominal pain.
- Eyes:** Risk of serious damage to the eyes which could result in permanent injury.
- Skin:** Very corrosive. Causes severe burns.
- Inhaled:** The vapour is irritating to the respiratory system causing coughing, choking, inflammation and ulceration of the respiratory tract. Exposure to high vapour concentration may lead to lung damage.

Effects from Chronic Exposure

Repeated exposure to low levels may produce erosion of the teeth and ulceration of the nose and gums.

R34 - Causes burns.

R37 - Irritating to respiratory system.

FIRST AID

- Ingestion:** If conscious, drink large quantities of water immediately. Do **NOT** induce vomiting. Seek immediate medical attention. Poison Information Centre phone 13 11 26 Australia wide.
- Eyes:** If in eyes, hold eyes open, flush with water for at least 15 minutes and see a Doctor immediately.
- Skin:** If skin contact occurs, remove contaminated clothing immediately and wash skin with plenty of cold water. See a Doctor immediately.
- Inhalation:** Remove victim from exposure – avoid becoming a casualty. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a face mask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek urgent medical attention.

First Aid Facilities: Shower, eye wash facilities must be provided where Hydrochloric Acid is being stored.

Advice to Doctor: Treat symptomatically as for strong acids. Show this MSDS to a medical practitioner.

PRECAUTIONS FOR USE

Exposure Standards: As per Worksafe Australia.

Substance	TWA		STEL	
	Ppm	mg/m ³	ppm	mg/m ³
Hydrogen Chloride	5	7.5	Peak Limitation	

ENGINEERING CONTROLS

Ensure ventilation is adequate to maintain air concentration below exposure standards. Use local exhaust ventilation to control airborne vapour. Administrative controls and personal protective equipment may be also required.

PERSONAL PROTECTION

Avoid all contact. Wear suitable personal protective equipment eg. Overalls, impervious gloves, splash proof chemical safety goggles including an approved respiratory protection. A face shield may also be necessary. Do not eat, drink or smoke in work areas. Wash hand thoroughly after handling this product. Maintain good housekeeping.

FLAMMABILITY

The product is not flammable but will react with metals to produce hydrogen, a flammable gas.

STORAGE AND HANDLING

STORAGE AND TRANSPORT

Store in suitable labelled containers in a cool, well ventilated place, out of direct sunlight and away from oxidising agents and foodstuffs. Keep containers tightly closed when not in use and when empty. Protect from damage. Restrict access to storage area and inspect periodically for deficiencies such as damage or leaks. Not to be loaded with classes 1,4.3, 5.1,6,7, food stuff and food stuff empties.

PACKING AND LABELLING

As required by ADG Code, National Code of Practice for the Labelling of Workplace Hazardous Substances and the Standard for the Uniform Scheduling of Drugs and Poisons.

SPILLS AND DISPOSAL

Restrict access to area. Ensure adequate ventilation. Provide adequate protective equipment, including impervious footwear. Contain using sand or soil – prevent run off into drains or waterways. Collect and seal in properly labelled drums for disposal. Neutralise remaining produce with Lime or Soda Ash or Sodium Bicarbonate, adjusting pH to 6-10. Self contained breathing apparatus may be needed for prolonged periods of exposure. Dispose of waste according to local waste disposal regulations. Contact the State Waste Management Authority.

FIRE AND/OR EXPLOSION HAZARD

Non flammable but flammable and explosive hydrogen gas may be formed in contact with metals. If involved in a fire, highly toxic fumes of hydrogen chloride will be evolved. Heating can cause decomposition of product leading to violent rupture of containers. Use water to keep the containers cool. Extinguish fire with water spray.

Extinguishing Medium: Use water spray.

Special Fire Fighting Instruction: Fire Fighters or others exposed to products of combustion should wear full protective clothing including self-contained breathing apparatus. Thoroughly decontaminate clothing after use.

EMERGENCY CONTACT INFORMATION

CONTACT: Glenn Burrell - (07) 5534 3136

DISCLAIMER

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