MATERIAL SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: HYDROCHLORIC ACID

Company: Recochem Inc. ABN: 69 010 485 999
Address : 1809 Lytton Road, Lytton, Queensland 4178
Phone: (07) 3308 5200 Fax: (07) 3308 5201
Emergency Telephone Number: (07) 3308 5200 Day, After Hours 1300 131 001

Other Names: Muriatic Acid, Hydrogen Chloride solution
Manufacturer's Product Code: 16409
Recommended Use: General Chemical – Acid

SECTION 2 HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA
A DANGEROUS GOODS ACCORDING TO THE CRITERIA OF THE ADG CODE

Symbols: C - Corrosive
Risk Phrases: R34 - Causes burns
R37 - Irritating to respiratory system
Safety Phrases: S1/2 - Keep locked up and out of reach of children
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45 - In case of accident or if you feel unwell seek medical advice immediately (show label where possible).

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients

Chemical Entity	*CAS Number*	*Proportion (%)*
Hydrochloric Acid	7647-01-0	< 30

SECTION 4 FIRST AID MEASURES

FIRST AID TREATMENT

Swallowed: Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.
Eye: If in eyes, hold eyes open, flood with water for at least 15 minutes or until advised by the Poisons Information Centre or a doctor.
Skin: If spilt on large area of skin of hair, immediately drench with running water and remove contaminated clothing. Continue to wash skin and hair with plenty of water until advised to stop by the Poisons Information Centre of a doctor. For skin burns, cover with a clean, dry dressing until medical help is available.
Inhaled: Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing. Seek immediate medical advice.

First Aid facilities: Potable water should be available to rinse eyes or skin. Provide eye baths and safety showers.
Advice to Doctor: Treat symptomatically.
Additional Information: None available.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazards: Non-combustible material.

Suitable Extinguishing Media: Not combustible, however, if material is involved in a fire use: water fog (or if unavailable fine water spray), foam, dry chemical powder, carbon dioxide.

Hazards from combustion products: Contact with metals may liberate hydrogen gas.

Precautions for Fire Fighters and Special Protective Equipment: Wear full protective clothing and self-contained breathing apparatus.

Additional Information: Hazchem code 2R.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Observe all local and national regulations.

Spills and Disposal: Clear area of all unprotected personnel. Wear protective equipment to prevent skin and eye contact and inhalation of vapours. Work upwind or increase ventilation. Cover with absorbent (inert material, sand or soil). Neutralise with lime or soda ash. Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. Caution - heat may be evolved on contact with water. If contamination of sewers or waterways has occurred advise local emergency services.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling and Storage: Avoid skin and eye contact and breathing vapour. Store in a cool, dry, well ventilated place out of direct sunlight. Store away from incompatible materials (section 10). Keep containers closed when not in use – check regularly for spills. Do not eat, drink or smoke in contaminated areas. Before eating, drinking or smoking, remove contaminated clothing and wash hands.

Flammability: Non-combustible material.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards: National Occupational Health & Safety Commission (NOHSC) Worksafe Australia has set an exposure standard 7.5mg/m^3 (5ppm) TWA.

Biological Limit Value: No biological limit allocated.

Personal Protective Equipment:

Respiratory Protection: In instances where concentrations are likely to exceed the exposure limits, an approved inorganic vapour respirator (AS/NZS 1715 and 1716) should be worn.

Hand Protection: Use impervious gloves.

Eye Protection: Wear safety goggles.

Protective Clothing: Use chemical resistant glove/gauntlets, boots and overalls.

Engineering Controls: Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Always wash hands before eating, drinking or using the toilet.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION / CHEMICAL PROPERTIES

Appearance	Clear, colourless to yellow fuming liquid
Odour	Hydrogen Chloride gas
pH	< 1
Vapour Pressure (mmHg @ 20°C):	11 - 115
Vapour Density (air = 1)	1.26
Boiling Point (°C):	91 - 98
Freezing/Melting Point (°C):	-63 to -27
Solubility in Water	Miscible with water
Specific Gravity (g/ml @ 20°C):	1.18
Flashpoint (°C):	Not applicable
Flammability Limits (%):	Not applicable
Auto Ignition Temperature (°C):	Not applicable
Percent Volatiles	No data

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Incompatible with alkalis, aluminium, tin, zinc and organic materials. Will absorb moisture from the atmosphere. Reacts exothermally with water.

SECTION 11 TOXICOLOGICAL INFORMATION

HEALTH EFFECTS

Acute:

Swallowed: Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.

Eye: Highly corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.

Skin: Highly corrosive to skin – may cause burns.

Inhaled: Breathing in mists or aerosols may result in respiratory irritation.

Chronic: No information for product.

Toxicity: Oral LD50 Rat 900mg/kg, Inhalation LC 50 (rat) 3124ppm/1h, Inhalation LC50 (mouse) 1108 ppm/1h.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity: Avoid contaminating waterways. This product is highly acidic. If large spills occur a water pH drop could be responsible for an environmental effect on aquatic organisms.

LC50 Mosquito fish (female) 282 mg/L/24hr
LC50 Shore Crab 240mg/L/48hr
LC50 Sand shrimp 260mg/L/48hr.

Mobility: Miscible with water.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal Methods: Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN Number:	1789	Proper Shipping Name:	HYDROCHLORIC ACID
Class:	8	Subsidiary Risk:	
Packing Group:	II	Hazchem Code:	2R
Special Precautions for User:	None		

SECTION 15 REGULATORY INFORMATION

Poisons Schedule : 6
AICS : Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76:2010) : 40

SECTION 16 OTHER INFORMATION

Further Information may be obtained by contacting Recochem on (07) 3308 5200