

# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** Hydrochloric Acid 28%

**Recommended Use:** Metal Cleaning. Swimming Pool Chemical. For reducing pH, Diluted 10-15% solution used for etching concrete, reducing calcium scale of some surfaces

**Supplier:** Midland Chemicals  
**ABN:** 91 622 018 986

**Street Address:** 18 Elliott Street  
Midvale  
Western Australia

**Telephone Number:** +61 08 9274 1992

**Facsimile:** +61 08 9250 1710

**Emergency Telephone:** **13 11 26 (ALL HOURS)**

## 2. HAZARDS IDENTIFICATION

Hazardous according to the criteria of ASCC [NOHSC:1008(2004)]

**Road and Rail;** Dangerous Goods according to the criteria of the Australian Dangerous Goods Code (ADG Code).

**Risk Phrases:** R34: causes burns.  
R36/37/38: Irritating to eyes, respiratory system and skin.

**Safety Phrases:** S2: Keep out of reach of children.  
S3: Keep in a cool place.  
S13: Keep away from food, drink and animal foodstuffs.  
S14: Keep away from acids, and ammonium salts and other Class 8 corrosive substances.  
S23: Do not breathe gas/fumes/vapour/spray  
S24/25: Avoid contact with skin and eyes  
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S27/28: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.  
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.  
S45: In case of accident or if you feel unwell seek medical advice immediately (show label where possible)  
S46: If swallowed, seek medical advice immediately and show this container or label.

**Poisons Schedule:** 6

**Packaging group number:** II

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Risk Phrases
Hydrochloric Acid	7647-01-1	28%	R36, R38
Water	7732-18-5	Up to 100%	

## 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor at once.

### Inhalation:

Remove from contaminated area immediately; avoid becoming a casualty. Ensure breathing can be maximised by removing any clothing that maybe obstructing the mouth or throat. Seek immediate medical attention.

### Skin Contact:

If spilt on skin or hair, immediately drench with running water and remove contaminated clothing. Wash affected areas thoroughly with mild soap and water. Seek medical attention immediately.

### Eye Contact:

Immediately wash in and around the eye area with large amounts of water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Seek immediate medical attention.

### Ingestion:

Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water, Never give anything by mouth to an unconscious person. If vomiting occurs give further water. Seek immediate medical assistance. Contact a doctor or the Poisons Information Centre Immediately.

### Medical attention and special treatment:

Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

### Hazards from combustion products:

Non combustible. Emits toxic fumes when heated.

### Precautions for fire fighters and special protective equipment:

Fire fighters to wear a positive-pressure self-contained breathing apparatus and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves). Clear fire of all non-emergency personnel. Stay up wind. Keep out of low areas. Eliminate ignition source. Risk of exposure to products of decomposition.

### Suitable Extinguishing Media:

Use extinguishing media appropriate to surrounding fire conditions. Remove containers not involved in the fire from vicinity.

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## 6. ACCIDENTAL RELEASE MEASURES

### Emergency procedures:

Clear area of all unprotected personnel. Personnel involved in the clean up should wear full protective clothing as described in section 8. Eliminate all sources of ignition. Increase ventilation. Stop leak if safe to do so. Isolate the danger area. Do not let product reach drains or waterways. If product enters sewers or waterways advise local emergency services, or Environmental Protection Authority.

### Methods and materials for containment and clean up:

Wear protective equipment to prevent skin and eye contact. Corrosive liquid. Oxidizing material. Stop leak if without risk. Dilute with large amounts of water or neutralize with lime or soda-ash. After treatment transfer spills to an approved liquid waste land fill site.

## 7. HANDLING AND STORAGE

This material must be stored, maintained and used in accordance with the relevant regulations.

### Conditions for safe storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area. Separate from flammables, acids, alkalis, reducing agents and combustibles.

### Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour, mists and aerosols. Keep container dry. Keep away from heat. Keep away from sources of ignition. Keep away from combustible material. Do not ingest. Do not breathe gas/fumes/ vapour/spray. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as reducing agents, combustible materials, organic materials, metals, acids.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Occupational Exposure Limits:

Exposure Standard – Peak Limitation =  $7\text{mg/m}^3$  (5ppm)

### Engineering controls:

Use in open well ventilated area or provide adequate exhaust ventilation in order to maintain exposure levels below standards if used in closed areas.

### Personal Protective Equipment:

When there is a risk of spill or splash, wear chemical goggles, safety helmet, Respirator and face shield, PVC gloves, rubber boots, and PVC jacket and trousers. If risk of inhaling vapour exists, use acid mist respirator or supplied-air breathing apparatus.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid  
**Colour:** Colourless to Yellow  
**Solubility:** miscible in water  
**Specific Gravity:** 1.16  
**Relative Vapour Density (air=1):** N/A  
**Vapour Pressure (20 °C):** N/A  
**Flash Point (°C):** N/A  
**Flammability Limits (%):** N/A  
**Auto Ignition Temperature (°C):** N/A  
**Boiling Point/Range (°C):** 100°C  
**pH:** 1 @ 1% solution

## 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Conditions to avoid:** Store in a cool dry place away from other chemicals especially Acids.

**Incompatible materials:** Incompatible with Acids.

**Hazardous decomposition products:** Nature of decomposition products is not known. Releases toxic fumes upon heating.

**Hazardous reactions:** Releases toxic fumes upon heating

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

**Ingestion:** Severe internal irritation due to corrosive effect.

**Eye contact:** Severe irritation and burns.

**Skin contact:** Severe irritation and burns.

**Inhalation:** Acute irritation of upper respiratory tract

**Long Term Effects:** No information available for the product.

**Toxicological Data:** Oral LD50 (rabbit) 900mg/Kg

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## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Harmful effect on aquatic organisms. Harmful effect due to pH shift. Lethal for fish from 25mg/L. For plants harmful effects begin at 6mg/L
<b>Persistence and degradability</b>	possible short term degradation products are not likely. However, long term degradation products may arise.

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal methods:</b>	Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.
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## 14. TRANSPORT INFORMATION

### Road and Rail Transport

classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; DANGEROUS GOODS.

**UN No:** 1789

**Class-Primary:** 8 corrosive

**Packing Group:** II

**Proper Shipping Name:** Hydrochloric Acid

**Hazchem Code:** 2R

### Marine Transport

classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

**UN No:** 1789

**Class-Primary:** 8 corrosive

**Packing Group:** II

**Proper Shipping Name:** Hydrochloric Acid

**Hazchem Code:** 2R

### Air Transport

classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

**UN No:** 1789

**Class-Primary:** 8 corrosive

**Packing Group:** II

**Proper Shipping Name:** Hydrochloric Acid

**Hazchem Code:** 2R

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## 15. REGULATORY INFORMATION

**Classification:** Hazardous according to criteria of Safe work Australia; HAZARDOUS SUBSTANCE

**Hazard Category:** Corrosive

**Risk Phrases:** R34: causes burns.  
R36/37/38: Irritating to eyes, respiratory system and skin.

**Safety Phrases:** S2: Keep out of reach of children.  
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**Poisons Schedule:** 6

## 16. OTHER INFORMATION

This material safety data sheet has been prepared by Midland Chemicals

This MSDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Midland Chemicals cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. If clarification or further information is needed, the user should contact Midland Chemicals at the contact details on page 1.

Midland Chemical's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.