

Active Chemicals Pty Ltd

ABN 16 117 075 180
Professional Cleaning chemicals

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Hydrochloric Acid solution 32% soln.

Other Names

Muriatic acid
Hydrochloric acid
Spirit of Salts

Uses

Acidising of petroleum wells, boiler scale removal, chemical intermediate, ore reduction, food processing, pickling, metal cleaning, laboratory reagent, pH adjuster

Company Details

Supplier:	Active Chemicals Pty Ltd	Telephone No.:	02 9826 0201
Address:	4/20 Powdrill Road Prestons NSW 2170	Facsimile No.:	02 9826 0208
		Email:	office@aquapac.com.au

Emergency Telephone No.:

Business Hours: 02 9826 0201

After Hours: 000 Fire brigade or Police

Poisons Information Centre: 131126

2. HAZARD IDENTIFICATION

U.N. Number:	1789	Class:	8
Hazchem:	2R	Poisons Schedule:	6
EPG:	8A1	Packaging Group:	II

Classified as hazardous according to criteria of NOHSC

Classified as a Dangerous Good for the purposes of transport.

HARMFUL IRRITANT

Risk Phrases

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R38 Irritating to skin.

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- R40 Limited evidence of a carcinogenic effect.
R41 Risk of serious eye damage.
R43 May cause sensitisation by skin contact.
R52 Harmful to aquatic organisms.
R53 May cause long-term adverse effects in the aquatic environment.

Safety Phrases

- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S27 Take off immediately all contaminated clothing.
S28:RODINE85 After contact with skin, wash immediately with plenty of soap-suds.
S37/39 Wear suitable gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61 Avoid release to the environment. Refer to special instructions/Material Safety Data Sheets.

3.COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Entity	CAS No.	Proportion
Hydrochloric acid	7647-01-0	30 -35%
Water	7732-18-5	65 – 70%

4. FIRST AID MEASURES

First Aid

Swallowed Rinse mouth thoroughly with water immediately. Give 1 – 3 cups of milk or water to drink. Seek medical attention immediately. Do NOT induce vomiting.

Eye Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical assistance.

Skin Immediately wash with copious amounts of water for at least 15 minutes. Remove contaminated clothing and wash before re-use. Seek medical advice.

Inhalation Remove victim from exposure - avoid becoming a casualty. Seek medical advice.

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Health Effects

Symptoms that may arise if the product is mishandled are:

Acute

Swallowed Irritant causing severe chemical burns.

Eye Irritant causing severe chemical burns.

Skin Irritant causing severe chemical burns.

Inhaled Respiratory irritant causing severe chemical burns.

Chronic Effects

Repeated or prolonged skin contact may lead to irritant contact dermatitis.

As with any chemical - ingestion, inhalation, and prolonged or repeated skin contact should be avoided by good occupational work practice.

Poison Information Centres in each State capital city can provide additional assistance.

Advice to Doctor

Treat symptomatically

5. Fire Fighting Measures

Not combustible material

Conditions to avoid:

High temperature: Toxic fumes of hydrogen chloride may be released if involved in a fire. Fire fighters are to wear self contained breathing apparatus and full protective clothing due to chlorine gas risk.

Materials to avoid:

Strong alkalis.

Hazardous Decomposition Products:

May produce hydrogen chloride and /or corrosive gases

Extinguishing Media:

Fire fighters should wear full protective clothing including self-contained breathing apparatus. In case of fire use water, foam, carbon dioxide, dry powder.

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6. Accidental Release Measures

Clear area of all unprotected personnel. Wear protective equipment to prevent skin and eye contamination including breathing apparatus.

Do not allow spill material to enter the environment. Neutralise spill then contain material using inert absorbent material eg vermiculite. Place into suitable labelled containers and hold for waste disposal. Wash area down with excess water once removed.

7. Handling and Storage

Precautions for Safe handling:

Ensure an eye bath and safety shower are available and ready for use.

Conditions for safe Storage:

Store in a cool, dry, well ventilated area. Keep container tightly closed when not in use.

**** KEEP CONTAINERS WELL SEALED ****

Avoid contact with eyes and skin. Avoid prolonged or repeated exposure. Always wash hands before smoking, eating, drinking or using the toilet.

Personal Protection

Eyes: The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate.

Skin: Rubber or PVC gloves, overalls or PVC suit, safety or rubber boots

Respiratory: If mist is generated the use of a air fed respirator is recommended.

PRECAUTIONS FOR USE

8. Exposure Controls / Personal Protection

(for atmospheric contaminants in the occupational environment)

No value assigned for this product by the NOHSC (Workcover). However, the exposure standard for the acid constituent is:

	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Hydrochloric acid	5	7.5		

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Engineering Controls

Maintain concentration below recommended exposure limit. Use in a well-ventilated area. Avoid generating and inhaling mists and aerosols. Keep containers closed when not in use. If risk of overexposure exists, wear SAA approved respirator to comply with Australian Standards, ensuring correct fit to obtain adequate protection.

Personal Protection

Eyes: The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate.

Skin: Rubber or PVC gloves, overalls or PVC suit, safety or rubber boots

Respiratory: If mist is generated the use of a air fed respirator is recommended.

Avoid contact with eyes and skin. Avoid prolonged or repeated exposure. Always wash hands before smoking, eating, drinking or using the toilet.

9. Physical Description / Properties

Appearance:	Clear to pale solution.		
Flash point:	N/A	Specific Gravity:	1.15 – 1.17
Boiling point (°C):	110 C	ph (5% solution)	< 1
Melting Point (°C):	N/A	Solubility in Water (g/L):	soluble
Vapour pressure:	4.6 mm Kg (1 atmosphere)		

Other Properties

Odour: characteristic pungent odour

Solubility: Soluble in water

10. Stability and Reactivity

Chemical Stability:

Product is stable under normal conditions of use, storage and temperature.

**** KEEP CONTAINERS WELL SEALED ****

Conditions to avoid:

High temperature: Toxic fumes of hydrogen chloride may be released if involved in a fire. Fire fighters are to wear self contained breathing apparatus and full protective clothing due to chlorine gas risk.

Materials to avoid:

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Hazardous Decomposition Products:

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11. Toxicological Information

Toxicology:

Toxicity Data Oral LD50 Rat: 900mg/Kg as Hydrochloric acid.

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Inhaled Respiratory irritant causing severe chemical burns.

Chronic Effects

Repeated or prolonged skin contact may lead to irritant contact dermatitis.

12. Ecological Information

Ecotoxicity

No data available.

Persistence and Degradability

This product is not readily Biodegradable and is harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Mobility No information available on mobility for this product. Completely Miscible with water.

Environmental Fate (Exposure) Do NOT allow product to enter waterways, drains or sewers.

13. Disposal Considerations

Disposal

Refer to State and Land Management Authority and relevant Environmental Protection Authority. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulation or recycled/reconditioned at an approved facility.

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14. Transport Information

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Hazchem:	2R	Poisons Schedule:	6
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Classified as hazardous according to criteria of NOHSC
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Use only plastic (PE, PP, PVC) or fibreglass containers/vessels – corrosive to mild and stainless steels. Other tanks should be lined with chloride resistant materials. Pumps should also be lined with chloride resistant materials.

15. Regulatory Information

Poisons Schedule 6

EPG 40

AICS Name No data available.

16. Other Information

Legend to Abbreviations and Acronyms

< less than > greater than

AICS Australian Inventory of Chemical Substances

CAS Chemical Abstracts Service (Registry Number)

CO2 Carbon Dioxide

COD Chemical Oxygen Demand

Deg C degrees Celsius

ERMA Environmental Risk Management Authority

g gram **g/cm³** grams per cubic centimetre **g/L** grams per litre

HSNO Hazardous Substance and New Organism

IDLH Immediately Dangerous to Life and Health

Immiscible liquids are insoluble in each other

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Kg kilogram **Kg/m³** kilograms per cubic metre

LC 50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals

Ltr Litre **m³** cubic metre **mbar** millibar **mg** milligram **mg/24H** milligrams per 24 hours

Mg/Kg milligrams per kilogram **mg/m³** milligrams per cubic metre

Misc miscible

miscible liquids form one homogeneous liquid phase regardless of the amount of either component present

mm millimetre **mPa.s** milli Pascal per second

N/A Not Applicable

NOHSC National Occupational Health and Safety Commission

OECD Organization for Economic Co-operation and Development

PEL Permissible Exposure Limit

Ppb parts per billion **ppm** parts per million

Ppm/2h parts per million per 2 hours **ppm/6h** parts per million per 6 hours

RCP Reciprocal Calculation Procedure

STEL Short Term Exposure Limit

TLV Threshold Limit Value

Tne tonne

TWA time Weighted Average

Ug/24H micrograms per 24 hours

UN United Nations (number)

W weight

Company Disclaimer

All information contained in this data sheet is as accurate and up-to-date as possible. Since Active Chemicals Pty Ltd cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application.

Active Chemicals Pty Ltd will not be responsible for damages of any nature resulting from the use or reliance upon the information. No expressed or implied warranties are given other than those implied mandatorily by Commonwealth, State or Territory legislation.

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