

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

ACTIV-ACID

Other Names

N/A

Uses

Replacement for hydrochloric acid. Calcium deposit removal for pulp and paper industry, dairy industry and water treatment.

Company Details

Supplier: Aquapac Pty Ltd
Address: 88 Lee Holm Road
St Marys NSW 2760

Telephone No.: 02 9673 1192
Facsimile No.: 02 9673 1193
Email: office@aquapac.com.au

Emergency Telephone No.:

Business Hours: 02 9673 1192

After Hours: 000 Fire brigade or Police

Poisons Information Centre: 131126

2. HAZARD IDENTIFICATION

U.N. Number:	None allocated	Class:	None allocated
Hazchem:	None allocated	Poisons Schedule:	None allocated
EPG:	None allocated	Packaging Group:	None allocated

Classified as hazardous according to criteria of NOHSC

Not classified as a Dangerous Good for the purpose of road and rail transport.

Aquapac Pty Ltd

ABN 36 114 118 311

Water Treatment & Specialty chemicals

Risk Statement:

R36/38 Irritating to eyes and skin.

Safety Statement:

R36/37/38 Irritating to eyes, respiratory system and skin.

S26 In case of contact with eyes, rinse immediately with plenty of water and Seek medical advice.

S28 After contact with skin wash with plenty of soap and water.

Hazard Category: X1 Harmful, Irritant

3.COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Entity	CAS No.	Proportion
Chloride content		10 - 15%
Organic salts		> 50%
Water	7732-18-5	balance

4. FIRST AID MEASURES

Swallowed Rinse mouth thoroughly with water immediately. If swallowed promote vomiting by usual means. Seek immediate medical assistance.

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 contaminated skin with plenty of water and then wash with soap and water. Remove contaminated clothing and wash before re-use. Seek medical advice.

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

Health Effects

Symptoms that may arise if the product is mishandled are:

Acute

Swallowed Ingestion may result in nausea.

Eye Irritating to eyes.

Skin Irritating to skin.

Inhaled Should not occur. However if heated may release chlorine which may cause respiratory irritation.

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

Fire / Explosion Hazards

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.

6. Accidental Release Measures

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

Contain do not allow spill material to enter the environment. 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:

Not classified as a Dangerous Good for the purposes of transport.

Use only plastic (PE, PP, PVC) or fibreglass containers/vessels. Other tanks should be lined with chloride resistant materials. Pumps should also be lined with chloride resistant materials.

**** 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 chlorine vapour half facepiece 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.

PRECAUTIONS FOR USE

8. Exposure Controls / Personal Protection

Exposure Standards (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		

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 chlorine vapour half facepiece 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.

Flammability

Not combustible material.

9. Physical Description / Properties

Appearance:	Clear to pale yellow solution.		
Viscosity:	16cps	Specific Gravity:	1.21
Boiling point (°C):	N/A	ph (5% solution)	< 1
Freezing point (°C):	-34 C	Solubility in Water (g/L):	soluble
Shelf life:	360 days		

Other Properties

- Odour:** characteristic
- Solubility:** Soluble in water in water

10. Stability and Reactivity

Chemical Stability:

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

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

Materials to avoid:

Strong alkalis.

Hazardous Decomposition Products:

May produce hydrogen chloride and /or corrosive gases

11. Toxicological Information

Toxicology:

Dermal Irritation / Corrosion Test:

A modified Draize method was used as described in OECD Guidelines for the Testing of Chemicals, Sec. 404, Paris 1981 (revised 1992). This study complies with the requirements of OECD principles of GLP, Annex 2, Paris 1981, revised as of July 1992.

“Activ-Acid” received a Primary Irritation Score of 2 +/- 0.9, and is classified as a “Mild Irritant”.

LD-50: 1121 mg/Kg (Rat, Oral)

Mutagenicity: This product was found NOT to be mutagenic when tested by the AMES Assay, (OECD Guideleines for Testing of Chemicals, Sec.471).

Biodegradation Test:

The COD is 3500 mg/L. This test method was Hach’s Reactor Digestion Method for Waste water and Sea Water. The Hach Reactor Digestion Method is a semi micro-adaption of the Standard Methods. (For comparisons, organic acids, surfactants, and glycol ethers will typically have COD’s in the range of 1,000,000 – 2,000,000 mg/L). The BOD is 500mg/L after 5 days and 600mg/L at 10 days. The test method used was part 507 Oxygen Demand (Biochemical) of the Standards Methods for Examination of Water and Waste water, 1985, 16th Ed.

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12. Ecological Information

Ecotoxicity

No data available.

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.

14. Transport Information

U.N. Number:	None allocated	Class:	None allocated
Hazchem:	None allocated	Poisons Schedule:	None allocated
EPG:	None allocated	Packaging Group:	None allocated

Classified as hazardous according to criteria of NOHSC

Not classified as a Dangerous Good for the purpose of road and rail transport

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

EPG

AICS Name No data available.

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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

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

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ABN 36 114 118 311

Water Treatment & Specialty chemicals

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 Aquapac 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.

Aquapac 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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