

# Aquapac Pty Ltd

ABN 36 114 118 311

Water Treatment & Specialty Chemicals

## MATERIAL SAFETY DATA SHEET

**Product: FERRIC CHLORIDE 42% Solution**

### Company Details

**Supplier:** Aquapac Pty Ltd  
**Address:** 4/20 Powdrill Road  
Prestons NSW 2170

**Telephone No.:** 02 9826 0201  
**Facsimile No.:** 02 9826 0208  
**Email:** williamsay@optusnet.com.au

### Emergency Telephone No.:

**Business Hours:** 02 9826 0201

**After Hours:** 000 Fire brigade or Police

### IDENTIFICATION

<b>U.N. Number:</b>	12582	<b>Class:</b>	8
<b>Hazchem:</b>	2Z	<b>Poisons Schedule:</b>	6
<b>EPG:</b>	8A1	<b>Packaging Group:</b>	III

Classified as hazardous according to criteria of NOHSC

### Ingredients

Chemical Entity	CAS No.	Proportion
Iron (III) Chloride	7705-08-0	42%
Water	7732-18-5	balance

### Other Names

Iron III Chloride solution  
Ferric Chloride solution

### Uses

Water treatment agent, chemical intermediate, manufacture of pigments and inks, laboratory reagent, pH adjuster.

### Physical Description / Properties

<b>Appearance:</b>	Reddish or yellow liquid.		
<b>Flash point:</b>	N/A	<b>Specific Gravity:</b>	1.40 approx
<b>Boiling point (°C):</b>		<b>ph (5% solution)</b>	
<b>Melting Point (°C):</b>	N/A	<b>Solubility in Water (g/L):</b>	soluble
<b>Vapour pressure:</b>			

### Other Properties

Doc Title: MSDS ferric Chloride 42%  
Version: 2.0 CURRENT  
Authorised by: WS

Doc ID: QA1  
Version Date: 1/7/06  
Page: 1 of 5

# Aquapac Pty Ltd

ABN 36 114 118 311

Water Treatment & Specialty Chemicals

**Odour:** Faint odour of hydrochloric acid  
**Solubility:** Soluble in water

## HEALTH HAZARD INFORMATION

### Health Effects

Symptoms that may arise if the product is mishandled are:

#### Acute

- Swallowed** Harmful if swallowed. May cause vomiting, diarrhea, abdominal pain and circulatory collapse. Can cause corrosive damage to stomach and small intestine.
- Eye** Causes burns.
- Skin** Irritant to skin. Causes burns. May be harmful if absorbed through skin.
- Inhaled** may be harmful if inhaled. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin. Symptom of exposure may include burning sensation, coughing, shortness of breath, headache, nausea and vomiting.

#### 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.***

#### 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.

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

Doc Title: MSDS ferric Chloride 42%  
Version: 2.0 CURRENT  
Authorised by: WS

Doc ID: QA1  
Version Date: 1/7/06  
Page: 2 of 5

# Aquapac Pty Ltd

ABN 36 114 118 311

Water Treatment & Specialty Chemicals

## Advice to Doctor

Treat symptomatically. Symptoms may be delayed for hours or days.

## PRECAUTIONS FOR USE

### Exposure Standards (for atmospheric contaminants in the occupational environment)

Values of time weighted average (TWA) assigned by Worksafe Australia as below:

	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Hydrochloric acid	5	7.5		
Iron salts		1		

## 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.

## Flammability

Not combustible material.

## SAFE HANDLING INFORMATION

Doc Title: MSDS ferric Chloride 42%  
Version: 2.0 CURRENT  
Authorised by: WS

Doc ID: QA1  
Version Date: 1/7/06  
Page: 3 of 5

# Aquapac Pty Ltd

ABN 36 114 118 311

Water Treatment & Specialty Chemicals

## Storage and Transport

Classified as a Dangerous Good for the purposes of 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.

## Spills

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.

## Disposal

Refer to State and Land Management Authority and relevant Environmental Protection Authority.

## 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. Oxidising agents

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.

## OTHER INFORMATION

## Toxicity

Toxicology:

Oral LD50 (rat) 450mg/Kg – Ferric chloride anhydrous

Oral LD50 (rat) 1160mg/Kg – 40% solution

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Doc Title: MSDS ferric Chloride 42%  
Version: 2.0 CURRENT  
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Doc ID: QA1  
Version Date: 1/7/06  
Page: 4 of 5

# Aquapac Pty Ltd

ABN 36 114 118 311

Water Treatment & Specialty Chemicals

## Risk Statement:

R22 harmful if swallowed.

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

R41 Risk of serious damage to eyes.

## Safety Statement:

S7/9 Keep container tightly closed and in a well ventilated place.

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

S39 Wear eye and face protection.

S44 If you feel unwell, contact a doctor or Poisons Information Centre immediately (show the label where possible).

Hazard Category: X1

Harmful, Irritant

## 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.

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