



DELTREX CHEMICALS

A Division of Campbell Brothers Limited

ABN 92 009 657 489

7-11 Burr Court

Laverton North

3026

Postal Address:

P.O Box 118, Newport

Victoria 3015

AUSTRALIA

Telephone: 61/3/9250-1000

FERRIC CHLORIDE SOLUTION 42%

ISSUED: OCTOBER , 1999

Hazardous according to criteria of Worksafe Australia.

IDENTIFICATION

TRADE NAME : Ferric Chloride Solution 42%
OTHER NAMES : Ferric Chloride Solution
U.N. NO. : 2582
DG CLASS : 8
HAZCHEM : 2Z
PACKING GROUP : III
POISON None Allocated
SCHEDULE :
USES : Water treatment. General Chemical

PHYSICAL DESCRIPTION/ PROPERTIES

Appearance, odour : Reddish liquid with faint odour of hydrogen chloride.

Melting Point : Not available.

Boiling Point : 105 -110°C

Vapour Pressure (20°C) : Not available.

Specific Gravity (20°C) : 1.45

Flash Point : >160°C

Flammability Limits (%) : Not available.

Vapour Density (air=1) : 1.5kg/m³

%Volatile by volume : 58

Solubility : Completely soluble in water.

OTHER PROPERTIES

Autoignition Temp (°C) : Not available.

pH : 1 - 2

Viscosity : 13 mPa.s

Bulk Density : 1440 kg/m³

Reactivity : Highly corrosive to most metals liberating flammable hydrogen gas. Hydrogen Chloride is produced on hydrolysis. Reactive with oxidising agents and strong bases.

INGREDIENTS

Chemical Name CAS Number Proportion

Ferric Chloride 7705-08-0 42%

Hydrogen Chloride 7647-01-0 <1%

Water 7732-18-5 to 100%

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

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

ACUTE EFFECTS

SWALLOWED: Swallowing large amounts may cause nausea, vomiting, diarrhoea, abdominal pain, irritation of the gastrointestinal tract and circulatory collapse.

EYE: Liquid or vapour may cause severe eye irritation. Corrosive to eyes. Contamination can result in permanent injury. Contact can cause corneal burns.

SKIN: Contact with skin may cause irritation. May cause staining of the skin.

INHALED: Exposure to vapour may cause irritation to mucous membrane and respiratory tract.

CHRONIC EFFECTS

No information available.

FIRST AID

SWALLOWED: Wash out mouth with plenty of water and give water to drink. DO NOT INDUCE VOMITING. 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: Wash contaminated skin with plenty of soap and water. Remove contaminated clothing and wash before re-use. If swelling, redness, blistering or irritation occurs seek medical advice.

INHALED: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. For all but the most minor symptoms, arrange for victim to be seen by doctor as soon as possible.

ADVICE TO DOCTOR

Treat symptomatically as for acidic material and iron salts. Can cause corneal burns and conjunctival ulceration.

PRECAUTIONS FOR USE

EXPOSURE STANDARDS

None established for this material. Exposure standard for constituents are:

Iron salts, soluble as Fe: TWA: 1mg/m³

Hydrogen Chloride, hydrolysis product: TWA : 7.5 mg/m³ (5ppm)

As published by the National Occupational Health & Safety Commission (Worksafe Australia).

ENGINEERING CONTROLS

Ensure ventilation is adequate to maintain air concentrations below recommended exposure standard. Avoid generating and inhaling mists. Use with local exhaust ventilation or while wearing acid mist respirator or air supplied mask. Keep containers closed when not in use.

PERSONAL PROTECTION

Avoid skin and eye contact and inhalation of vapour. Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. Respiratory protection is required if concentration exceeds exposure standard. Wear acid mist respirator. Always wash hands before smoking, eating, drinking or using the toilet.

FLAMMABILITY

Non combustible material.

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

Store in cool dry, well-ventilated place. Keep containers closed when not in use. Do not store with incompatible products such as oxidising agents, cyanides, metals, strong bases and foodstuffs. Classified as a Class 8 Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road or Rail.

SPILLS

Increase ventilation. Wear protective equipment to prevent skin and eye contamination and inhalation of vapours. Contain using sand or soil - prevent run off into drains and waterways. Use absorbent (soil, sand, vermiculite or other inert material). Neutralise with lime or soda ash. Collect and seal in properly labelled drums for disposal. Wash down area with large quantities of water. If contamination of sewers or waterways has occurred advise the local emergency services.

DISPOSAL

Refer to State Land Waste Management Authority.

FIRE/EXPLOSION HAZARDS

Not flammable. Can liberate flammable hydrogen gas upon contact with most metals. On burning will emit toxic fumes such as hydrogen chloride. Keep containers cool with water spray. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

EXTINGUISHING MEDIA: Water, foam, dry agent (carbon dioxide, dry chemical powder).

OTHER INFORMATION AND REFERENCES

ENVIRONMENTAL IMPACT

Product has low potential for bioaccumulation.

Harmful to fish and aquatic invertebrates.

TOXICITY

Oral LD50 (rat): 2900 mg/kg

Hazard Category: Irritant

RISK PHRASES

R41: Risk of serious damage to eyes

SAFETY PHRASES

S25: Avoid contact with eyes.

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

S28: After contact with skin, wash immediately with plenty of water.

S39: Wear eye/face protection.

PRINCIPAL REFERENCE

Safety Data Sheet - Ferric Chloride Liquor 42%

Orica Australia Pty Ltd

Issued March 98

CONTACT POINT

Phone: (03) 9250 1000

Phone: 1 800 628 724 (24hr - Emergency Contact)

This MSDS has been prepared from current technical data and summarises at the date of issue our best knowledge of the health and safety information of the product, and in particular how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request

END OF MSDS NO 080