

## 1. IDENTIFICATION

<b>Product Name</b>	<b>Ferric Chloride Solution</b>
<b>Other Names</b>	Ferric Chloride Liquid
<b>Uses</b>	Coagulation and clarification of drinking water, process water and wastewater treatment units; Flocculant; Precipitant.
<b>Chemical Family</b>	No Data Available
<b>Chemical Formula</b>	Unspecified
<b>Chemical Name</b>	Iron chloride (FeCl <sub>3</sub> ), aqueous solution
<b>Product Description</b>	No Data Available

### Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

### Emergency Contact Details

*For emergencies only; DO NOT contact these companies for general product advice.*

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

## 2. HAZARD IDENTIFICATION

**Poisons Schedule (Aust)**

Not Scheduled

## Globally Harmonised System

**Hazard Classification** Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

**Hazard Categories** Corrosive to Metals - Category 1  
Acute Toxicity (Oral) - Category 4  
Skin Corrosion/Irritation - Category 1C  
Serious Eye Damage/Irritation - Category 1

**Pictograms**

**Signal Word** Danger

**Hazard Statements**

<b>H290</b>	May be corrosive to metals.
<b>H302</b>	Harmful if swallowed.
<b>H314</b>	Causes severe skin burns and eye damage.

**Precautionary Statements**

Prevention	<b>P270</b>	Do not eat, drink or smoke when using this product.
	<b>P280</b>	Wear protective gloves/protective clothing/eye protection/face protection.
Response	<b>P390</b>	Absorb spillage to prevent material-damage.
	<b>P305 + P351 + P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	<b>P310</b>	Immediately call a POISON CENTER or doctor.
	<b>P303 + P361 + P353</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	<b>P301 + P330 + P331</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	<b>P363</b>	Wash contaminated clothing before reuse.
Storage	<b>P304 + P340</b>	IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
Disposal	<b>P406</b>	Store in corrosive resistant container with a resistant inner liner.
	<b>P501</b>	Dispose of contents/container in accordance with local / regional / national / international regulations.

**National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Dangerous Goods Classification** Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Ingredients**

Chemical Entity	Formula	CAS Number	Proportion
Iron chloride	FeCl <sub>3</sub>	7705-08-0	35 - 45 %
Hydrochloric acid	HCl	7647-01-0	<=0.5 %
Water	H <sub>2</sub> O	7732-18-5	Balance %

**4. FIRST AID MEASURES***Description of necessary measures according to routes of exposure*

<b>Swallowed</b>	IF SWALLOWED: Rinse mouth, then drink a glass of water. Do not induce vomiting. Immediately call a Poison Centre or doctor/physician for advice. Never give anything by mouth to an unconscious person.
<b>Eye</b>	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a Poison Centre or doctor/physician for advice.
<b>Skin</b>	IF ON SKIN: Remove contaminated clothing and shoes immediately. Flush skin with running water for at least 15 minutes. For minor skin contact, avoid spreading material on unaffected skin. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse.
<b>Inhaled</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poison Centre or doctor/physician for advice. Apply resuscitation if victim is not breathing - Do not use direct mouth-to-mouth method if victim ingested or inhaled the substance; use alternative respiratory method or proper respiratory device - Administer oxygen if breathing is difficult.
<b>Advice to Doctor</b>	Treat symptomatically. Keep victim calm and warm - Obtain immediate medical care. Ensure that attending medical personnel are aware of the identity and nature of the product(s) involved, and take precautions to protect themselves.
<b>Medical Conditions Aggravated by Exposure</b>	No information available.

**5. FIRE FIGHTING MEASURES**

<b>General Measures</b>	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. Avoid getting water inside containers.
<b>Flammability Conditions</b>	Non-combustible; Material itself does not burn.
<b>Extinguishing Media</b>	If material is involved in a fire, use an extinguishing agent suitable for the surrounding fire.
<b>Fire and Explosion Hazard</b>	Contact with metals may evolve flammable hydrogen gas. Closed containers exposed to heat may explode.
<b>Hazardous Products of Combustion</b>	Fire or heat will produce irritating, toxic and/or corrosive gases, including Hydrogen chloride gas.
<b>Special Fire Fighting Instructions</b>	Contain runoff from fire control or dilution water - Runoff may be toxic and/or corrosive and may pollute waterways.
<b>Personal Protective Equipment</b>	Wear positive pressure self-contained breathing apparatus (SCBA) and chemical splash suit. Fully-encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for this material.
<b>Flash Point</b>	No Data Available
<b>Lower Explosion Limit</b>	No Data Available
<b>Upper Explosion Limit</b>	No Data Available
<b>Auto Ignition Temperature</b>	No Data Available
<b>Hazchem Code</b>	2X

**6. ACCIDENTAL RELEASE MEASURES**

<b>General Response Procedure</b>	Ensure adequate ventilation - Ventilate enclosed spaces before entering. ELIMINATE all ignition sources. Do not touch or walk through spilled material - high slip hazard. Do not breathe vapours and prevent contact with eyes, skin and clothing.
<b>Clean Up Procedures</b>	Absorb with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION 13). *Contaminated absorbent material may pose the same hazard as the spilt product.
<b>Containment</b>	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Use water spray to reduce vapours. Move containers from spill area.

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<b>Decontamination</b>	The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Flush spill area with water.
<b>Environmental Precautionary Measures</b>	Spillages and decontamination runoff should be prevented from entering drains and watercourses.
<b>Evacuation Criteria</b>	Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher ground.
<b>Personal Precautionary Measures</b>	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8).

### 7. HANDLING AND STORAGE

<b>Handling</b>	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid aerosol formation. Do not breathe mist/aerosols and prevent contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). Absorb spillage to prevent material damage (see SECTION 6).
<b>Storage</b>	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep away from heat and sources of ignition - No smoking. Keep away from foodstuffs and incompatible materials (see SECTION 10). Use appropriate containment to avoid environmental contamination.
<b>Container</b>	Keep only in the original container or an approved alternative made from a compatible material. Do not store in unlabelled containers. *Containers of this material may be hazardous when empty since they retain product residues (vapours, liquid); observe all warnings and precautions listed for the product.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>General</b>	No specific exposure standards are available for this product. For Iron salts, soluble (as Fe): - Safe Work Australia Exposure Standard: TWA = 1 mg/m <sup>3</sup> . - New Zealand Workplace Exposure Standard: TWA = 1 mg/m <sup>3</sup> . COMPONENT: Hydrogen chloride (CAS No. 7647-01-0): - Safe Work Australia Exposure Standard: TWA = 5 ppm (7.5 mg/m <sup>3</sup> ) Peak limitation. - New Zealand Workplace Exposure Standard: TWA = 5 ppm (7.5 mg/m <sup>3</sup> ) Ceiling.
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No information available.
<b>Engineering Measures</b>	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
<b>Personal Protection Equipment</b>	- Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: For high concentration, combination filter device (refer to AS/NZS 1715 & 1716). For emergencies, or instances where the exposure levels are not known, use a full face piece positive pressure, air supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen deficient atmospheres. - Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Use chemical safety goggles and/or full face shield where splashing is possible. - Hand protection: Wear protective gloves. Recommended: Chemical-resistant, impervious gloves (elbow-length), e.g. NR (natural rubber (caoutchouc, natural latex), CR (chloroprene rubber), NBR (nitrile rubber), butyl rubber, FKM (fluororubber), PVC (polyvinyl chloride). - Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Wear impervious protective clothing, including boots, gloves lab coat, apron or coveralls, as appropriate.
<b>Special Hazards Precautions</b>	No information available.
<b>Work Hygienic Practices</b>	Do not eat, drink or smoke when using this product. Wash hands before breaks and at the end of work. Wash contaminated clothing prior to re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Liquid
<b>Appearance</b>	Liquid
<b>Odour</b>	Characteristic, acid
<b>Colour</b>	Orange to reddish-brown
<b>pH</b>	1 - 2
<b>Vapour Pressure</b>	40 mmHg (@ 20 °C)
<b>Relative Vapour Density</b>	No Data Available
<b>Boiling Point</b>	No Data Available
<b>Melting Point</b>	No Data Available
<b>Freezing Point</b>	No Data Available
<b>Solubility</b>	Completely soluble in water
<b>Specific Gravity</b>	1.42 +/- 0.02
<b>Flash Point</b>	No Data Available
<b>Auto Ignition Temp</b>	No Data Available
<b>Evaporation Rate</b>	No Data Available
<b>Bulk Density</b>	No Data Available
<b>Corrosion Rate</b>	No Data Available
<b>Decomposition Temperature</b>	No Data Available
<b>Density</b>	1.43 g/cm <sup>3</sup>
<b>Specific Heat</b>	No Data Available
<b>Molecular Weight</b>	No Data Available
<b>Net Propellant Weight</b>	No Data Available
<b>Octanol Water Coefficient</b>	No Data Available
<b>Particle Size</b>	No Data Available
<b>Partition Coefficient</b>	No Data Available
<b>Saturated Vapour Concentration</b>	No Data Available
<b>Vapour Temperature</b>	No Data Available
<b>Viscosity</b>	No Data Available
<b>Volatile Percent</b>	No Data Available
<b>VOC Volume</b>	No Data Available
<b>Additional Characteristics</b>	No information available.
<b>Potential for Dust Explosion</b>	Not applicable.
<b>Fast or Intensely Burning Characteristics</b>	No information available.
<b>Flame Propagation or Burning Rate of Solid Materials</b>	No information available.
<b>Non-Flammables That Could Contribute Unusual Hazards to a Fire</b>	No information available.
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	Non-combustible; Material itself does not burn.
<b>Reactions That Release Gases or Vapours</b>	Fire or heat will produce irritating, toxic and/or corrosive gases, including Hydrogen chloride gas.
<b>Release of Invisible Flammable Vapours and Gases</b>	Contact with metals may evolve flammable hydrogen gas.

**10. STABILITY AND REACTIVITY**

<b>General Information</b>	May be corrosive to metals.
<b>Chemical Stability</b>	Stable under normal temperature conditions and recommended use.
<b>Conditions to Avoid</b>	Avoid exposure to heat and light. Avoid contact with incompatible materials.
<b>Materials to Avoid</b>	Incompatible/reactive with metals, alkalis, strong oxidising agents, reducing agents.
<b>Hazardous Decomposition Products</b>	Fire or heat will produce irritating, toxic and/or corrosive gases, including Hydrogen chloride gas. Contact with metals may evolve flammable hydrogen gas.
<b>Hazardous Polymerisation</b>	Will not occur.

**11. TOXICOLOGICAL INFORMATION**

<b>General Information</b>	<ul style="list-style-type: none"> <li>- Acute toxicity: Harmful if swallowed. Ingestion may cause burns to mouth, throat and stomach. Adverse symptoms may include stomach pains.</li> <li>- Skin corrosion/irritation: Causes severe skin burns. Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.</li> <li>- Eye damage/irritation: Causes serious eye damage. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.</li> <li>- Respiratory/skin sensitisation: No danger of sensitisation.</li> <li>- Germ cell mutagenicity: No known significant effects or critical hazards.</li> <li>- Carcinogenicity: No known significant effects or critical hazards.</li> <li>- Reproductive toxicity: No known significant effects or critical hazards.</li> <li>- STOT (single exposure): Breathing in mists or aerosols may produce respiratory irritation. Vapour may be very irritating or corrosive to the respiratory system.</li> <li>- STOT (repeated exposure): No systemic toxicity is expected following repeated exposure. May affect the liver.</li> <li>- Aspiration toxicity: No information available.</li> </ul>
<b>Acute</b>	
<b>Ingestion</b>	Acute toxicity (Oral): COMPONENT: Iron chloride (CAS No. 7705-08-0): - LD50, Mouse: 1,300 mg/kg bw.
<b>Other</b>	Acute toxicity (Dermal): COMPONENT: Iron chloride (CAS No. 7705-08-0): - LD50, Rat: >2,000 mg/kg bw.
<b>Carcinogen Category</b>	None

**12. ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	Aquatic toxicity: - LC50, Fish ( <i>Oryzias latipes</i> ): 46.6 mg/L (96 h). - EC50, Crustacea ( <i>Daphnia magna</i> ): 19.0 mg/L (48 h). - ErC50, Algae ( <i>Selenastrum capricornutum</i> ): 6.9 mg/L (72 h).
<b>Persistence/Degradability</b>	No information available.
<b>Mobility</b>	No information available.
<b>Environmental Fate</b>	No known significant effects or critical hazards. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
<b>Bioaccumulation Potential</b>	No information available.
<b>Environmental Impact</b>	No Data Available

**13. DISPOSAL CONSIDERATIONS****General Information**

The generation of waste should be avoided or minimised wherever possible. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**Special Precautions for Land Fill**

This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Handle contaminated packaging in the same way as the substance itself.

**14. TRANSPORT INFORMATION****Land Transport (Australia)**

ADG Code

<b>Proper Shipping Name</b>	FERRIC CHLORIDE SOLUTION
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available
<b>EPG</b>	37 Toxic And/Or Corrosive Substances Non-Combustible
<b>UN Number</b>	2582
<b>Hazchem</b>	2X
<b>Pack Group</b>	III
<b>Special Provision</b>	No Data Available

**Land Transport (Malaysia)**

ADR Code

<b>Proper Shipping Name</b>	FERRIC CHLORIDE SOLUTION
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available
<b>EPG</b>	37 Toxic And/Or Corrosive Substances Non-Combustible
<b>UN Number</b>	2582
<b>Hazchem</b>	2X
<b>Pack Group</b>	III
<b>Special Provision</b>	No Data Available

**Land Transport (New Caledonia)**

<b>Proper Shipping Name</b>	FERRIC CHLORIDE SOLUTION
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available
<b>EPG</b>	37 Toxic And/Or Corrosive Substances Non-Combustible
<b>UN Number</b>	2582
<b>Hazchem</b>	2X
<b>Pack Group</b>	III
<b>Special Provision</b>	No Data Available

**Land Transport (New Zealand)**

NZS5433

<b>Proper Shipping Name</b>	FERRIC CHLORIDE SOLUTION
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available
<b>EPG</b>	37 Toxic And/Or Corrosive Substances Non-Combustible
<b>UN Number</b>	2582
<b>Hazchem</b>	2X
<b>Pack Group</b>	III
<b>Special Provision</b>	No Data Available

**Land Transport (United States of America)**

US DOT

<b>Proper Shipping Name</b>	FERRIC CHLORIDE SOLUTION
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available
<b>ERG</b>	154 Substances - Toxic and/or Corrosive (Non-Combustible)
<b>UN Number</b>	2582
<b>Hazchem</b>	2X
<b>Pack Group</b>	III
<b>Special Provision</b>	No Data Available

**Sea Transport**

IMDG Code

<b>Proper Shipping Name</b>	FERRIC CHLORIDE SOLUTION
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	2582
<b>Hazchem</b>	2X
<b>Pack Group</b>	III
<b>Special Provision</b>	No Data Available
<b>EMS</b>	F-A, S-B
<b>Marine Pollutant</b>	No

**Air Transport**

IATA DGR

<b>Proper Shipping Name</b>	FERRIC CHLORIDE SOLUTION
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	2582
<b>Hazchem</b>	2X
<b>Pack Group</b>	III
<b>Special Provision</b>	No Data Available

**National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road &amp; Rail (ADG Code)

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## Dangerous Goods Classification

Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

## 15. REGULATORY INFORMATION

**General Information** No Data Available

**Poisons Schedule (Aust)** Not Scheduled

### Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

**Approval Code** Additives Process Chemicals and Raw Materials Corrosive Group Standard 2020 HSR002491  
\*HSR004519 (Revoked)

### National/Regional Inventories

<b>Australia (AIC)</b>	Listed
<b>Canada (DSL)</b>	Not Determined
<b>Canada (NDSL)</b>	Not Determined
<b>China (IECSC)</b>	Not Determined
<b>Europe (EINECS)</b>	Not Determined
<b>Europe (REACH)</b>	Not Determined
<b>Japan (ENCS/METI)</b>	Not Determined
<b>Korea (KECI)</b>	Not Determined
<b>Malaysia (EHS Register)</b>	Not Determined
<b>New Zealand (NZIoC)</b>	Listed
<b>Philippines (PICCS)</b>	Not Determined
<b>Switzerland (Giftliste 1)</b>	Not Determined
<b>Switzerland (Inventory of Notified Substances)</b>	Not Determined
<b>Taiwan (NCSR)</b>	Not Determined
<b>USA (TSCA)</b>	Not Determined

## 16. OTHER INFORMATION

**Related Product Codes** FECHLO1800, FECHLO1801, FECHLO1802, FECHLO1803, FECHLO1804, FECHLO1805, FECHLO1806, FECHLO1807, FECHLO1808, FECHLO1809, FECHLO1810, FECHLO1811, FECHLO1812, FECHLO1813, FECHLO1814, FECHLO1815, FECHLO1816, FECHLO1817, FECHLO1818, FECHLO1819, FECHLO1820, FECHLO1821, FECHLO1822, FECHLO1823, FECHLO1824, FECHLO1825, FECHLO1826, FECHLO1827, FECHLO1828, FECHLO1829, FECHLO1830, FECHLO1832,

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FECHLO1833, FECHSO0040, FECHSO0041, FECHSO0045, FECHSO1000, FECHSO1001, FECHSO1002, FECHSO1003, FECHSO1004, FECHSO1100, FECHSO1101, FECHSO1104, FECHSO1127, FECHSO1200, FECHSO1400, FECHSO1500, FECHSO1600, FECHSO2000, FECHSO2001, FECHSO2200, FECHSO2300, FECHSO2400, FECHSO2401, FECHSO2500, FECHSO2501, FECHSO2502, FECHSO2503, FECHSO2504, FECHSO2505, FECHSO2506, FECHSO2507, FECHSO2508, FECHSO2510, FECHSO2515, FECHSO2518, FECHSO2600, FECHSO2601, FECHSO2700, FECHSO2900, FECHSO2901, FECHSO2910, FECHSO3000, FECHSO3200, FECHSO3201, FECHSO3400, FECHSO3500, FECHSO3501, FECHSO3502, FECHSO3503, FECHSO3600, FECHSO3700, FECHSO3742, FECHSO3800, FECHSO3900, FECHSO4000, FECHSO4100, FECHSO4200, FECHSO4300, FECHSO4301, FECHSO4302, FECHSO4305, FECHSO4307, FECHSO4500, FECHSO5000, FECHSO5100, FECHSO5200, FECHSO5500, FECHSO5600, FECHSO6000, FECHSO6100, FECHSO8000

<b>Revision</b>	5
<b>Revision Date</b>	01 Mar 2021
<b>Reason for Issue</b>	SDS updated
<b>Key/Legend</b>	< Less Than > Greater Than <b>AICS</b> Australian Inventory of Chemical Substances <b>atm</b> Atmosphere <b>CAS</b> Chemical Abstracts Service (Registry Number) <b>cm<sup>2</sup></b> Square Centimetres <b>CO<sub>2</sub></b> Carbon Dioxide <b>COD</b> Chemical Oxygen Demand <b>deg C (°C)</b> Degrees Celcius <b>EPA (New Zealand)</b> Environmental Protection Authority of New Zealand <b>deg F (°F)</b> Degrees Farenheit <b>g</b> Grams <b>g/cm<sup>3</sup></b> Grams per Cubic Centimetre <b>g/l</b> Grams per Litre <b>HSNO</b> Hazardous Substance and New Organism <b>IDLH</b> Immediately Dangerous to Life and Health <b>immiscible</b> Liquids are insoluable in each other. <b>inHg</b> Inch of Mercury <b>inH<sub>2</sub>O</b> Inch of Water <b>K</b> Kelvin <b>kg</b> Kilogram <b>kg/m<sup>3</sup></b> Kilograms per Cubic Metre <b>lb</b> Pound <b>LC<sub>50</sub></b> LC stands for lethal concentration. LC <sub>50</sub> 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. <b>LD<sub>50</sub></b> LD stands for Lethal Dose. LD <sub>50</sub> is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals. <b>ltr or L</b> Litre <b>m<sup>3</sup></b> Cubic Metre <b>mbar</b> Millibar <b>mg</b> Milligram <b>mg/24H</b> Milligrams per 24 Hours <b>mg/kg</b> Milligrams per Kilogram <b>mg/m<sup>3</sup></b> Milligrams per Cubic Metre <b>Misc or Miscible</b> Liquids form one homogeneous liquid phase regardless of the amount of either component present. <b>mm</b> Millimetre <b>mmH<sub>2</sub>O</b> Millimetres of Water <b>mPa.s</b> Millipascals per Second <b>N/A</b> Not Applicable <b>NIOSH</b> National Institute for Occupational Safety and Health <b>NOHSC</b> National Occupational Heath and Safety Commission <b>OECD</b> Organisation for Economic Co-operation and Development <b>Oz</b> Ounce <b>PEL</b> Permissible Exposure Limit <b>Pa</b> Pascal <b>ppb</b> Parts per Billion <b>ppm</b> Parts per Million <b>ppm/2h</b> Parts per Million per 2 Hours <b>ppm/6h</b> Parts per Million per 6 Hours <b>psi</b> Pounds per Square Inch <b>R</b> Rankine

**SAFETY DATA SHEET FERRIC CHLORIDE SOLUTION REVISION 5, DATE 01 MAR 2021**

**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

**wt** Weight