

## SAFETY DATA SHEET

### Section 1. Identification of the material and the supplier

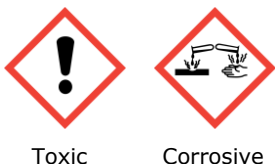
Product: **Polyferric Sulphate**  
 Item Code:  
 Product Use: Flocculation agent for water treatment in municipal water supplies. Phosphate removal in sewage treatment.  
 Restriction of Use: Refer to Section 15  
 New Zealand Supplier: Ravensdown Ltd  
 Address: 292 Main South Road  
 Hornby Christchurch 8042  
 Telephone: +64 3 3538554  
 Emergency Telephone: **0800 764 766 (National Poison Centre)**  
 Date of SDS Preparation: 6 March 2017

### Section 2. Hazards Identification

**This substance is hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001***

**EPA Approval No: Water Treatment Chemicals (Corrosive) – HSR002681**

#### Pictograms



Signal Word: **DANGER**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1D (oral)	H302	Harmful if swallowed.	Category 4
8.1A	H290	May be corrosive to metals.	Category 1
8.2B	H314	Causes severe skin burns and eye damage.	Category 1B
8.3A	H318	Causes serious eye damage.	Category 1

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P234	Keep only in original container.
P260	Do not breathe fumes, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective clothing.

<b>Response Code</b>	<b>Response Statement</b>
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

<b>Storage Code</b>	<b>Storage Statement</b>
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.

<b>Disposal Code</b>	<b>Disposal Statement</b>
P501	Dispose of as a hazardous waste according to local and national regulations.

### **Section 3. Composition / Information on Ingredients**

<b>Ingredients</b>	<b>Wt%</b>	<b>CAS NUMBER.</b>
Sulphuric Acid, Iron (III), salt (polyferric Sulphate)	60	10028-22-5
Water	40	7732-18-5

### **Section 4. First Aid Measures**

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.
If on Skin	If spilt on large areas of skin or hair, immediately drench with running water and remove clothing. Continue to wash skin and hair with plenty of water (and soap if material is insoluble) until advised to stop by the Poisons Information Centre or a doctor. If skin irritation occurs: get medical advice/attention.
If Swallowed	Rinse mouth. Do NOT induce vomiting. Give a glass of water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if needed.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

## Section 5. Fire Fighting Measures

<b>Hazard Type</b>	Not flammable or combustible. Corrosive substance.
<b>Hazards from combustion products</b>	May evolve hydrogen gas in reactions with some metals and sulphur compounds on thermal decomposition
<b>Suitable Extinguishing media</b>	Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).
<b>Precautions for firefighters and special protective clothing</b>	Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.
<b>HAZCHEM CODE</b>	<b>2X</b>

## Section 6. Accidental Release Measures

Clear area of any unprotected personnel.

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Neutralise with lime or soda ash.

Collect and seal in properly labelled containers or drums for disposal. Wash area down with excess water. Recover the cleaning water for subsequent disposal.

## Section 7. Handling and Storage

### Precautions for Handling:

- Read label before use.
- Keep only in original container.
- Do not breathe fumes, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective clothing.

### Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store in a cool, dry, well ventilated place.
- Protect from freezing.
- Keep containers closed when not in use - check regularly for leaks.
- Keep out of reach of children.
- Store locked up.
- Store in corrosive resistant container with a resistant inner liner.

## Section 8 Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>

No ingredients of the product have specific exposure limits however the WES does limit exposure to soluble iron salts.

Iron salts, soluble, as Fe: WES-TWA 1 mg/m<sup>3</sup>

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term

Exposure Limit (WESSTEL). *The 15-minute average exposure standard.* Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

### Engineering Controls

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

### Personal Protection Equipment

<b>Eyes</b>	Wear goggles with side shields. Avoid wearing contact lenses.
<b>Hands and Skin</b>	Wear overalls, elbow-length impervious gloves, splash apron or equivalent chemical impervious outer garment, and rubber boots.
<b>Respiratory</b>	If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
<b>General</b>	Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Reddish/Brown viscous liquid
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	0.5 - 1
<b>Boiling Point</b>	Not available
<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Not applicable
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Specific Gravity</b>	1.45-1.6 @25°C
<b>Solubilities</b>	Miscible with water.
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Kinematic Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not applicable

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Conditions to Avoid</b>	Avoid contact with foodstuffs.
<b>Incompatible Materials</b>	Reacts with strong alkalis.
<b>Hazardous Decomposition Products</b>	None known.

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Harmful if swallowed. Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract. Symptoms of swallowing large amounts of soluble iron compounds may be delayed several hours and can include epigastric pain, vomiting blood and circulatory failure.
<b>Dermal</b>	Not applicable
<b>Inhalation</b>	Breathing in mists or aerosols may produce respiratory irritation however this is not an expected route of exposure when used as directed.
<b>Eye</b>	Causes serious eye damage. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.
<b>Skin</b>	Causes severe skin burns and eye damage.

### Chronic Effects:

<b>Carcinogenicity</b>	Not applicable
<b>Reproductive Toxicity</b>	Not applicable
<b>Germ Cell Mutagenicity</b>	Not applicable
<b>Aspiration</b>	Not applicable
<b>STOT/SE</b>	Not applicable
<b>STOT/RE</b>	Not applicable

## Section 12. Ecotoxicological Information

This product is not hazardous to the environment, however avoid contaminating waterways.

<b>Persistence and degradability</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	No data available

## Section 13. Disposal Considerations

**Disposal Method:** Dispose of as a hazardous waste according to local and national regulations.

**Disposal methods (guidance only):** Water Treatment Chemicals (Corrosive) Group Standard 2006 15

- (1) A substance must be disposed of by—
  - (a) exporting the substance from New Zealand as waste; or
  - (b) treating the substance so that it is no longer a hazardous substance; or
  - (c) discharging the substance into the environment so that, after reasonable mixing, the concentration of the substance in an environmental medium does not exceed any relevant tolerable exposure limit and/or environmental exposure limit set for the substance or any of its component(s).
- (2) In subclause 1(b), "treating the substance" includes depositing the substance in a landfill, incinerator or sewage facility providing—

- (a) the landfill, incinerator or sewage facility renders the substance non-hazardous by a means other than dilution; or
- (b) the concentration of the substance in any discharge from the landfill, incinerator or sewage facility does not, after reasonable mixing, exceed any relevant tolerable exposure limit and/or environmental exposure limit set for the substance or any of its component(s).
- (3) Notwithstanding subclause (1)(c), if the substance or one or more of its components is bioaccumulative and not rapidly degradable the substance must be treated before discharge into the environment to reduce the percentage by volume of the substance in the discharge to 1% or less.
- (4) A substance with no ecotoxic (HSNO class 9) hazard may be discharged into the environment without complying with subclause (1)(c) if it is rapidly degradable and the products of degradation are not hazardous.
- (5) This clause does not apply to a substance that is intended for recycling.

## Section 14      Transport Information

**This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012**

### Road and Rail Transport

UN No: 3264  
 Class-primary 8  
 Packing Group II  
 Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
 (Contains Ferric Sulphate)

### Air Transport

UN No: 3264  
 Class-primary 8  
 Packing Group II  
 Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
 (Contains Ferric Sulphate)

### Marine Transport

UN No: 3264  
 Class-primary 8  
 Packing Group II  
 Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
 (Contains Ferric Sulphate)

## Section 15      Regulatory Information

EPA Approval Code: Water Treatment Chemicals (Corrosive) – HSR002681

HSNO Classification: 6.1D (oral), 8.1A, 8.2B, 8.3A

HSNO Controls:

Trigger quantities for this substance:

	<b>Trigger Quantity</b>
Approved Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	250L (8.2B)
Emergency Response Plan	1000L(8.2B)
Secondary Containment	1000L(8.2B)
Restriction of Use	None

## Section 16      Other Information

Product Name: Polyferric Sulphate  
 Date of SDS: 6 March 2017

Issued by: Technical Compliance Consultants (NZ) Ltd  
 Tel: 64 9 475 5240      www.techcomp.co.nz

## Glossary

EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

1. HSNO Approved Code of Practice: Preparation of Safety Data Sheets, September 2006.

### Disclaimer

This document has been issued by TCC (NZ) Ltd and serves as their Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the New Zealand distributor, if further information is required.

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