



Safety Data Sheet

Date of Issue: 01.10.2020

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1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name: **ECP LTD**
Address: PO Box 34125, Birkenhead, Auckland 0746
Emergency Tel: NZ: 0800 154 666 (24 h)
Telephone: 09 480 4386
Fax 09 480 4385
Product Ferroun Solution 0.025M
Code 23707

Regulatory Classification numbers

CAS Number: 3829-86-5 (1,10-phenanthroline hydrochloride)
UN Number: 3082
HSNO Approval Number: HSR002596
DG Class : 9
Secondary DG Class (if any): N/A
Packing group: III

Recommended use: Laboratory Investigations

2. HAZARD IDENTIFICATION

GHS Classification

Aquatic toxicity (Acute or Chronic) (Category C)

2.2 GHS Label elements, including precautionary statements

Pictogram none

Signal word none

Hazard statement(s)

H412 Harmful to aquatic life with long lasting effects.

Hazard Classification Australia:
Not classified as Hazardous according to criteria of National Occupational Health & Safety Commission, Australia (NOHSC).
Not Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
New Zealand:
Not classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
Not classified as Dangerous Goods for transport, according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.

Other Information The toxicological properties of this material have not been investigated.

Exercise appropriate procedures to prevent opportunities for contact with the skin, eyes or clothing and to prevent inhalation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	Water	7732-18-5	98 %
	Ferroin		2 %

4. FIRST AID MEASURES

Inhalation	If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms persist seek medical attention.
Ingestion	Do not induce vomiting. Wash out mouth thoroughly with water. If symptoms develop seek medical attention.
Skin	Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.
Eye	If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and persist seek medical attention.
First Aid Facilities	Eyewash and normal washroom facilities.
Advice to Doctor	Treat symptomatically.
Other Information	For advice in an emergency, contact a Poisons Information Centre (Phone Australia 13 1126; New Zealand 0800 POISON / 0800 764 766) or a doctor at once.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Use extinguishing media that are suitable for the surrounding combustible materials.
Hazards from Combustion Products	Non combustible material.
Specific Hazards	This product is non-combustible. However, following evaporation of aqueous component under fire conditions, the non-aqueous component may decompose and/or burn. As a water based product, if spilt on electrical equipment the product will cause short-circuits.
Precautions in connection with Fire	Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Wear appropriate personal protective equipment and clothing to minimise exposure. Increase ventilation. If possible contain the spill. Place inert absorbent material onto spillage. Collect the material and place into a suitable labelled container. Do not dilute material but contain. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.
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7. HANDLING AND STORAGE

Precautions for Safe Handling	Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Avoid inhalation of vapours and mists, and skin or eye contact. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.
Conditions for Safe Storage	Store in a cool, dry, well-ventilated area, out of direct sunlight. Store in suitable, labelled containers. Keep containers closed when not in use. Ensure that storage conditions comply with applicable local and national regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	No exposure standards have been established for this material by Safe Work, Australia or the Occupational Safety and Health Service (OSH) of the New Zealand Department of Labour. However, over-exposure to some chemicals may result in enhancement of pre-existing adverse medical conditions and/or allergic reactions and should be kept to the least possible levels.
Biological Limit Values	No biological limits allocated.
Engineering Controls	Use with good general ventilation. If mists or vapours are produced, local exhaust ventilation should be used.
Respiratory Protection	If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable mist filter should be used. Reference should be made to Australian/New Zealand Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.
Eye Protection	Safety glasses with side shields or chemical goggles should be worn. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.
Hand Protection	Wear gloves of impervious material e.g. PVC or rubber gloves. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.
Body Protection	Suitable protective work wear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Odour	Not available
Melting Point	Not available
Boiling Point	100°C at 760 mmHg (approximate)
Solubility in Water	Completely soluble
Specific Gravity	1.0
pH Value	Not available
Vapour Pressure	18 mmHg at 20°C (approximate)
Vapour Density (Air=1)	Not available
Colour	Red
Volatile Component	98% (approximate)
Flash Point	Not available

Flammability	This product is non-combustible.
Auto-Ignition Temperature	Not available
Flammable Limits - Lower	Not available
Flammable Limits - Upper	Not available
Molecular Weight	692.5

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions of storage and handling.
Conditions to Avoid	Extremes of temperature and direct sunlight.
Incompatible Materials	Not available.
Hazardous Decomposition Products	Thermal decomposition may result in the release of toxic and/or irritating fumes and gases including oxides of carbon, oxides of nitrogen, oxides of sulphur and oxides of iron.
Hazardous Polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information	No toxicity data available for this product.
Inhalation	Inhalation of product vapours may cause irritation of the nose, throat and respiratory system.
Ingestion	Ingestion of this product may irritate the gastric tract causing nausea and vomiting.
Skin	May be irritating to skin. The symptoms may include redness, itching and swelling.
Eye	May be irritating to eyes. The symptoms may include redness, itching and tearing.
Chronic Effects	Prolonged or repeated skin contact may cause defatting leading to dermatitis.

12. ECOLOGICAL INFORMATION

Ecotoxicity	No ecological data are available for this material.
Persistence / Degradability	Not available
Mobility	Not available
Bioaccumulative Potential	Not available
Environment Protection	Prevent this material entering waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations	<p>The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.</p> <p>Product Disposal:</p> <p>This product can be disposed through a licensed commercial waste collection service, in accordance with applicable local and national regulations. This product is non-hazardous and therefore the New Zealand HSNO regulations regarding disposal do not</p>
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apply. However other regulations may apply.
This is a water-based/water-soluble product and therefore can be sent through a Waste Water Treatment Plant and after treatment can be discharged into environment through the sewerage or drainage systems as authorized.

Container Disposal:
The product is non-hazardous, therefore, the packaging may be re-used or recycled if it has been treated to remove any residual contents of the substance. Any wash-off water from the container cleaning process should be sent to a suitable waste water treatment plant before discharge into the environment.
In New Zealand, the packaging (that may or may not contain any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

14. TRANSPORT INFORMATION

Transport Information	<p>Road and Rail Transport (ADG Code): Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition). Not classified as Dangerous Goods for transport, according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.</p> <p>Marine Transport (IMO/IMDG): Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.</p> <p>Air Transport (ICAO/IATA): Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.</p>
IMDG Marine Pollutant (MP)	No

15. REGULATORY INFORMATION

Regulatory Information	<p>Not classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia. Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).</p>
Poisons Schedule	Not Scheduled
National and or International Regulatory Information	<p>New Zealand: Not classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001. All components of this product are listed on the New Zealand Inventory of Chemicals (NZIoC) or exempted.</p>

16. DISCLAIMER

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the

company has been advised of the possibility of such damages.

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