MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Product Name : Ferrous sulphate, heptahydrate
Other Names : Ferrous sulfate, heptahydrate; Iron sulfate, heptahydrate
Uses : Water and sewage treatment; reducing agent; wood preservative; fertiliser; chemical manufacture; Feed additive.
Chemical Family : No Data Available
Chemical Formula : FeO4S.7H2O
Chemical Name : Sulfuric acid, iron(2+) salt (1:1), heptahydrate
Product Description : No Data Available

Contact Details of the Supplier of this Safety Data Sheet
Organisation : COSMO CHEMISTRY
Location :
Office No. 713, 7th Floor, Millennium Business Hub,
Sarthana Jakatnaka, Varachha Main Road,
Surat, Gujarat, India - 395006
Email : info@cosmochemistryindia.com
Contact No.: +91 9797977958

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 :
Acute Toxicity (Oral) – Category 4
Skin Corrosion/Irritation – Category 2
Serious Eye Damage/Irritation – Category 2
Signal Word : Warning

Hazard Statements

H302 :	Harmful if swallowed
H315 :	Causes skin irritation
H319 :	Causes serious eye irritation
NZ9.3 :	Hazardous to terrestrial vertebrates

Precautionary Statements
Prevention

P280	Wear protective gloves/eye protection/face protection
P270	Do not eat, drink or smoke when using this product

Response

P302 + P352	IF ON SKIN: Wash with plenty of water
P337 + P313	If eye irritation persists: Get medical attention
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P330	Rinse mouth
P332 + P313	If skin irritation occurs: Get medical attention
P362	Take off contaminated clothing
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
Disposal	
P501	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 : NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Safe Work Australia
National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations
Hazard Classification : Hazardous according to the criteria of Safe Work Australia under Model WHS Regulations

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Entity	Formula	CAS Number	Proportion
Ferrous sulfate, heptahydrate	FeSO4.7H2O	7782-63-0	≤100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth. Do not induce vomiting unless directed to do so by medical personnel. Call a Poison Centre or doctor/physician for advice. Never give anything by mouth to an unconscious person.
Eye	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. If eye irritation persists, get medical advice/attention.
Skin	IF ON SKIN: Wash skin with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.

Advice to Doctor Treat symptomatically. Symptoms may be delayed for several hours.
Medical Conditions Aggravated by Exposur No information available.

5. FIRE FIGHTING MEASURES

Geeral Measuresn	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
Flammability Conditions	Non-combustible; Material does not burn.
Extinguishing Media	if material is involved in a fire, use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction.
Fire and Explosion Hazard	Decomposes on heating, emitting toxic fumes.
Hazardous Products of Combustion	Fire or heat may produce irritating, toxic and/or corrosive fumes including oxides of Sulfur and Iron.

Special Fire Fighting Instructions Contain runoff from fire control or dilution water - Runoff may pollute waterways.

Personal Protective Equipment Wear positive pressure self-contained breathing apparatus (SCBA) and chemical splash suit.

Flash Point :	No Data Available
Lower Explosion Limit :	No Data Available
Upper Explosion Limit :	No Data Available
Auto Ignition Temperature :	No Data Available
Hazchem Code :	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation. Do not touch or walk through spilled material. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing.
Clean Up Procedures	Collect material (sweep or vacuum up) and place into suitable, properly labelled containers for disposal.
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust cloud.
Decontamination	Wash area down with excess water.
Environmental Precautionary Measures	Prevent entry into drains and waterways.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
Personal Precautionary Measures	Wear protective equipment to prevent skin and eye contamination and inhalation of dust.

7. HANDLING AND STORAGE

Handling

Ensure adequate ventilation. Avoid generating dust. Avoid breathing dust/aerosols and contact with eyes, skin and clothing.

Storage

Store in a cool, dry and well-ventilated place out of direct sunlight.

Container

Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product.For Iron salts (as Fe):Safe WorkAustralia Exposure StandardTWA = 1 mg/m³New Zealand Workplace Exposure StandardsTWA = 1 mg/m³NIOSH RELTWA = 1 mg/m³
Exposure Limits :	No Data Available
Biological Limits :	No information available
Engineering Measures	Use local exhaust ventilation.
Personal Protection Equipment	
	Respiratory ProtectionDust mask / particulate filter respiratorEye Protection Safety glasses with side shields or chemical gogglesHand Protection Impervious gloves (Nitrile rubber)Skin / Body Protection Protective clothing, overalls, safety shoes

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State :	Solid
Appearance :	Crystals or powder
Odour :	Odourless
Colour :	Grey to green (glaucous)
pH :	3 – 5 (10% solution)
Vapour Pressure :	No Data Available
Relative Vapour Density :	No Data Available
Boiling Point :	No Data Available
Melting Point :	64 °C
Freezing Point :	No Data Available
Solubility :	Soluble in water
Specific Gravity :	1.898 (Water = 1)
Flash Point :	No Data Available
Auto Ignition Temp :	No Data Available
Evaporation Rate :	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available

VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	No information available.
Fast or Intensely Burning Characteristics	No information available

10. STABILITY AND REACTIVITY

General Information	Reacts in moist air to form ferric sulfate.
Chemical Stability	Stable under recommended storage conditions.
Conditions to Avoid	Avoid generating dust. Avoid exposure to air and moisture.
Materials to Avoid	Oxidising agents, alkalis, soluble carbonates.
	Hazardous Decomposition ProductsOxides of sulfur and iron.
Hazardous Polymerisation	Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	Acute toxicity Harmful if swallowed; may cause nausea, vomiting, diarrhoea and gastrointestinal irritation. Skin irritation Causes skin irritation. Eye irritation Causes serious eye irritation. Respiratory effects Breathing dust may cause respiratory irritation. Acute toxicity (oral) LD50 Rat : 5800 mg/kg Carcinogen Category : None

12. ECOLOGICAL INFORMATION

Ecotoxicity	LC50 Fish : 925 mg/L (96 h) EC50 Daphnia magna : 152 mg/L (48 h)
Persistence / Degradability :	No information available
Mobility :	No information available
Environmental Fate	Do not allow large quantities to enter groundwater or sewage.
Bioaccumulation Potential	Does not bioaccumulate.

13. DISPOSAL CONSIDERATIONS

Dispose of contents/container to a licensed disposal company in accordance with local regulations.

Special Precautions for Landfill	No information available.

14. TRANSPORT INFORMATION

Sea Transport	(IMDG)
Proper Shipping Name :	Ferrous sulphate, heptahydrate
Marine Pollutant :	No Comments
NON-DANGEROUS GOODS:	Not regulated for sea transport.
Air Transport	(IATA)
Proper Shipping Name :	Ferrous sulphate, heptahydrate Comments
NON-DANGEROUS GOODS:	Not regulated for air transport.
Dangerous Goods Classification	NOT Dangerous Goods according to ADG Code.

15. REGULATORY INFORMATION

This product is not classified as dangerous for supply.
Safety, Health and Environmental Regulations : Nil
Chemical Safety Assessment : Not required

---

16. OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information.
Users should make their own investigations to determine suitability of the information.
The company shall not be liable for any claims, losses or damages resulting from the use of this information.
Revision : 3
Revision Date : 01 DEC 2025