

Material Safety Data Sheet / Safety Data sheet

Iron (II) Sulphate Heptahydrate

Section 1: Chemical Product Identifier and Synonyms

Product Name: Iron (II) Sulphate Heptahydrate

UN Number: Not available.

CAS Number: 7782-63-0

Synonym: Iron (II) Sulfate, Ferrous Sulphate, Ferrous Sulfate, Green Vitriol, Iron Vitriol, Copperas, Melanterite, Szomolnokite

Chemical Formula: $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$

Section 2: Composition and Information on Ingredients

Composition

Name	CAS Number:	% By Weight
Iron (II) Sulphate Heptahydrate	7782-63-0	99%

Toxicology Data On Ingredients: Iron (II) Sulphate Heptahydrate LD50: Not Available. LC50: Not Available

Section 3: Hazards Identification

Potential Acute Health Effects:

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause drowsiness and dizziness.

May cause damage to organs through prolonged or repeated exposure.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.

Section 4: First Aid Measures**Eye Contact:**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact:

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation:

Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion:

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

Section 5: Fire and Explosion Data

Flammability of the Product: Not available.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Sulfur oxides Thermal decomposition can lead to release of irritating gases and vapors.

Fire Hazards in Presence of Various Substances: Not available.

Explosion Hazards in Presence of Various Substances: Not available.

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not available.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures**Small Spill:**

Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. This chemical should not be released into the environment.

Large Spill:

Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Precautions:

Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

Storage:

Keep containers tightly closed in a dry, cool and well-ventilated place.

Section 8: Exposure Controls / Personal Protection

Engineering Controls:

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Personal Protection:

Safety glasses. Gloves. Protective clothing. Dust production: dust mask with filter.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Crystalline Powder.

Odour: Not available.

Taste: Not available.

Molecular Weight: 278.01 g/mole

Colour: Light Green

pH (1% soln/water): 3 - 5 (5 %)

Boiling Point: 300 °C / 572 °F

Melting Point: 64 °C / 147.2 °F

Critical Temperature: Not available.

Specific Gravity: 1.898 (Water = 1)

Vapour Pressure: Not available.

Vapour Density: Not available.
Volatility: Not available.
Odour Threshold: Not available.
Water/Oil Dist. Coeff.: Not available.
Ionicity (in Water): Not available.
Dispersion Properties: Not available.
Solubility: Partly soluble in water.

Section 10: Stability and Reactivity Data

Stability: Product is stable under normal conditions.
Instability Temperature: Not available.
Conditions of Instability: Avoid dust formation. Incompatible products. Excess heat. Exposure to air. Exposure to moist air or water.
Incompatibility with various substances: Strong oxidizing agents, Strong bases.
Special Remarks on Reactivity: Not available.
Special Remarks on Corrosivity: Not available.
Polymerization: Does not occur.

Section 11: Toxicological Information

Routes of Entry: Eye contact. Inhalation. Ingestion.
Toxicity to Animals: LD50 = 319 mg/kg (Rat) LC50: Not available.
Chronic Effects on Humans: Not available.
Other Toxic Effects on Humans: Not available.
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: Not available.
Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Not available.
BOD5 and COD: Not available.
Products of Biodegradation: Not available.
Toxicity of the Products of Biodegradation: Not available.
Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Information

Waste Disposal: Dispose of in accordance with local regulations

Section 14: Transport Information

DOT Classification: This product does not require a classification for transport.

Identification: Not available.

Special Provisions for Transport: Not available.

Section 15: Regulatory Information

Regulations: Labelling according to Regulation (EC) No 1272/2008.

Section 16: Other Information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials. The author will not be held liable for any damage or injury caused by this product and does not obviate the requirement for end users to carry out their own workplace and specific use risk assessment.

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