



SAFETY DATA SHEET

Issue Date 1-July-2013

Revision Date New

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Ferrous Sulfate Heptahydrate

Other Means of Identification

SDS # MAS-006

Recommended Use of the Chemical and Restrictions on Use

Recommended Use General fertilizer.

Details of the Supplier of the Safety Data Sheet

Supplier Address

Marion Ag Service
7746 St. Paul Hwy N.E.
St. Paul, OR 97137

Emergency Telephone Number

Company Phone Number 503-633-4281
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product

Emergency overview: Product dusts may irritate respiratory tract.

NFPA Rating: Health=1, Fire=0, Reactivity=0

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects: the substance may be toxic to kidneys, liver, cardiovascular system, central nervous system,,: Repeated or prolonged exposure to the substance can produce target organs damage.

Long-term and/or delayed effects: Reproductive effects have been reported in animals

.Carcinogen Status: OSHA: Not listed NTP: Not listed IARC: Not listed

Hazardous Statement – Causes skin Irritation

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product Name: Ferrous Sulfate Heptahydrate

Molecular Weight: 278.05

Chemical Formula: FeSO₄·7H₂O

4. FIRST AID MEASURES

First Aid Measures

Inhalation: Remove from exposure area to fresh air immediately. If breathing is difficult, oxygen may be administered by a qualified operator. Keep person warm and at rest. Get medical attention for irritation or any other symptom.

Eye Contact: Flush eyes immediately with large amounts of water or normal saline solution occasionally lifting upper and lower lids until no evidence of product remains (approximately 15-20 minutes). Cover with sterile bandages. Call a physician if irritation persists.

Ingestion: DO NOT Induce vomiting unless directed to do so by medical personal. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin Contact Remove contaminated clothing and shoes. Wash affected area with soap or mild detergent and rinse with water until no evidence of product remains. Get medical assistance for irritation, or any other symptom.

Note to Physicians: The decision as to whether the severity of poisoning requires administration of any antidote and actual dose required should be made by a qualified medical personnel.

5. FIRE-FIGHTING MEASURES

Flash Point: None

Auto Ignition Temperature: Not Determined

Fire and Explosion Hazard: N/A

Extinguishing Media: Use any standard agent suitable for surrounding structural fire or for other chemicals that may be involved.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Dike area to prevent runoff and contamination of water sources.

Hazardous Combustion Products: N/A

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill: Pick up dry spills by scooping, shoveling or vacuuming and place into containers for reuse or disposal.

Wear respirator, protective clothing and gloves. Keep unnecessary people away. Obey all federal, State, and local regulations when storing or disposing of ferrous sulfate.

Environmental Precautions: See Section 12 for additional ecological information.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling: Wash face, hands, and any exposed skin thoroughly after handling.

Storage Conditions: Hygroscopic keep containers tightly closed in a dry, cool and well-ventilated place. Do not store above 24C (75.2F)

.8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Ingredient	OSHA PEL	ACGIH TLV	OTHER VALUES
No ingredients	-----	-----	-----

*=ACGIH Biological Exposure Value **= AIHA Workplace Environmental Exposure Level

Ventilation: Use of local exhaust is recommended at product transfer points and where dusty conditions exist.

Eye Protection: Wear safety glasses. Use splash shields or safety goggles are recommended for very dusty conditions.

Clothing: Wear trousers and long sleeve shirt to avoid skin contact with this product. Clean work clothing before taking them home (preferred) or launder separately from household laundry.

Gloves: Wear cotton or canvas protective gloves to prevent contact with this product.

Respirator: For normal product handling, use an NIOSH approved air-purifying dust respirator. For extremely dusty condition, the use of a full face air purifying particulate respirator is recommended.

EMERGENCY WASH FACILITIES: Where there is the potential that an employee's eyes and/or skin may be exposed to this product; the employer should provide an eye wash fountain and safety shower or another source of running water within the immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Description: Light greenish/gray or white, free-flowing fine granules.

Molecular formula: FeSo₄ 7H₂o(ferrous sulfate Heptahydrate)

Molecular Weight: 278.05

Melting Point: Loses water at 149 degrees F, decomposes above 300 degrees C

Boiling Point: Decomposition at 300 degrees C

Vapor Pressure: Not applicable

Water Solubility: 448.50 gms in 100ml.

Specific Gravity: 1.898 @ 25 degrees C

10. STABILITY AND REACTIVITY

Reactivity: Stable under normal conditions

Conditions to Avoid: Extremely high temperatures. Keep out of reach of children.

Incompatible Materials: Oxidizing agents and alkalis.

Hazardous Decomposition: Products of sulfur oxides, i.e.:SO₂ and SO₃

Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological information listed below is for Ferrous Sulfate

Acute Toxicity:

LD50: 1520 mg/kg, oral, rat

LD50: 1480 mg/kg, oral, mouse

Local Effects: Corrosive to eyes, ingestion, skin irritant, mucous membranes.

Eyes: dose-420 ug: moderate (rabbit)

Inhalation: Inhalation of dust may cause irritation of the respiratory tract with sore throat.

Ingestion: In patients not in shock or coma, induce emesis with syrup of ipecac if vomiting has not occurred. . Follow with gastric. lavage using Deferoxamine, 2 grams in 1 liter of water which contains sodium bicarbonate 20 gm/L. Leave 10 grams of deferoxamine in 50 ml of 5% sodium bicarbonate in the stomach. Maintain airway, blood pressure, and respiration

Delayed/Chronic:

Carcinogen status: Data not available.

Chronic Exposure: Reproductive effects have been reported in animals.

12. ECOLOGICAL INFORMATION

Acute Aquatic Toxicity: No data available.

Degradability: No data available

Log Bio concentration Factor (BCF): No data available

Log Octanol/Water partition coefficient: No data available

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging: Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

This product is not regulated in surface transportation in non-bulk quantities. The information below is for shipments exceeding 1,000 pounds in single package, container, truck, or trailer.

US DOT Shipping name: Environmentally hazardous substances, solid, n.o.s. (Ferrous Sulfate), 9, UN 3077,PGIII, ERG31

US DOT Hazard Class: 9- Miscellaneous hazardous material.

US DOT Identification Number: UN 3077

US DOT Packing Group: III

US DOT Label Code: 9

Reportable Quantity: 1,000 lbs. (454kg)

15. REGULATORY INFORMATION

TSCA Status: All ingredients are listed on the TSCA Inventory of Chemical Substances.

Other TSCA Issues: None

SARA 311 Classification: Not Listed

SARA 313 Notification: There are no ingredients on the SARA 313 reporting list.

California Proposition 65: No data available.

Canadian Inventory: All ingredients are listed on the Canadian domestic Substances List.

WHMIS: This Product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the controlled Products Regulations. Classification: D2B

16. OTHER INFORMATION

NFPA Rating: Health: 1 **Flammability:** 0 **Reactivity:** 0

Label Hazard Warning: Warning! Causes irritation to skin, eyes and respiratory tract.

Label Precaution: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing dust. Use with adequate ventilation.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.