

1. Product and Company Identification

Product Code: FESO4
Product Name: Ferrous Sulfate Heptahydrate
Trade Name: copperas, green vitriol
Company Name: BVV
 1251 Frontenac Rd
 Naperville, IL 60563
Web site address: shopbvv.com
Emergency Contact: Velocity EHS (800)255-3924
Intended Use: Iron Source

BVV Phone Number:
(331) 281-0154

2. Hazards Identification

Acute Toxicity: Oral, Category 4
Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2



GHS Signal Word: Warning

GHS Hazard Phrases:
 H302 - Harmful if swallowed.
 H315 - Causes skin irritation.
 H319 - Causes serious eye irritation.

GHS Precaution Phrases:
 P264 - Wash hands thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P362+364 - Take off contaminated clothing and wash it before reuse.

GHS Response Phrases:
 P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P330 - Rinse mouth.
 P302+352 - IF ON SKIN: Wash with plenty of soap and water.
 P332+313 - If skin irritation occurs, get medical advice/attention.
 P305+351+338 - IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+313 - If eye irritation persists, get medical advice/attention.

GHS Storage and Disposal Phrases: No phrases apply.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
7782-63-0	Ferrous sulfate	100.0 %

4. First Aid Measures

Emergency and First Aid Procedures:

- In Case of Inhalation:** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention. Never give anything by mouth to an unconscious person.
- In Case of Skin Contact:** Wash skin with soap and water.
- In Case of Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If eye irritation persists, get medical advice/attention.
- In Case of Ingestion:** If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. Fire Fighting Measures

- Flash Pt:** No data.
- Explosive Limits:** LEL: No data. UEL: No data.
- Autoignition Pt:** No data.
- Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.
- Unsuitable Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.
- Fire Fighting Instructions:** Substance is noncombustible.
- Flammable Properties and Hazards:** Non Combustible.
- Hazardous Combustion Products:** sulfur oxides.

6. Accidental Release Measures

- Protective Precautions, Protective Equipment and Emergency Procedures:** Not available.
- Environmental Precautions:** Reportable Quantity: 1000 lbs.
- Steps To Be Taken In Case Material Is Released Or Spilled:** Clean up spills immediately, observing precautions in Protective Equipment section.

7. Handling and Storage

- Precautions To Be Taken in Handling:** Store in a cool dry place.
- Precautions To Be Taken in Storing:** Keep container closed when not in use.
- Other Precautions:** None.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
7782-63-0	Ferrous sulfate	No data.	TWA: 1 mg/m3	No data.

SAFETY DATA SHEET

Ferrous Sulfate Heptahydrate

Page: 3
Printed: 11/28/2020
Revision: 11/28/2018

Recommended Exposure Limits: Not available.

Respiratory Equipment (Specify Type): ANSI approved respirator.

Eye Protection: Goggles.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Work/Hygienic/Maintenance Practices: Wash thoroughly after handling.

9. Physical and Chemical Properties

Physical States: ☐ Gas ☐ Liquid ☒ Solid

Appearance and Odor: Appearance: Bluish green to brown crystals.
Odor: metal odor.
Odor Threshold: N/A.

pH: 5% Sol 2.5 - 5

Melting Point: 149.00 F (65.0 C)

Boiling Point: 572.00 F (300.0 C)

Flash Pt: No data.

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: No data UEL: No data.

Vapor Pressure (vs. Air or mm Hg): No data.

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): No data.

Density: 55 LB/CF

Solubility in Water: 46.8g/100g

Octanol/Water Partition Coefficient: N/A

Autoignition Pt: No data.

Decomposition Temperature: 572.00 F (300.0 C)

Viscosity: NE

Molecular Formula & Weight: FeSO₄*7H₂O 278.0

10. Stability and Reactivity

Stability: Unstable ☐ Stable ☒

Conditions To Avoid Instability: No data available.

Incompatibility - Materials To Avoid: No data available.

Hazardous Decomposition or Byproducts: No data available.

Possibility of Hazardous Reactions: Will occur ☒ Will not occur ☐

Conditions To Avoid - Hazardous Reactions: No data available.

11. Toxicological Information

Toxicological Information: CAS# 7782-63-0: Acute toxicity, LD50, Oral, Mouse, 1520. MG/KG. Results: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Mydriasis (pupillary dilation). Behavioral: Convulsions or effect on seizure threshold. Gastrointestinal: Nausea or vomiting. ; American Journal of the Medical Sciences., Slack Inc., 6000 Grove Rd, Thorofare, NJ 08086, Vol/p/yr: 230,491, 1955

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological Information: No data available.

CAS# 7782-63-0: LC50, Bluegill (*Lepomis macrochirus*), 51.20 PPM, 96 H, Mortality. Results: Morphological changes. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000

LC50, Rainbow Trout (*Oncorhynchus mykiss*), 20.80 PPM, 96 H, Mortality. Results: Affected fish stopped schooling behavior. Affected fish became hypoactive. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000

Effective concentration to 50% of test organisms., Water Flea (*Daphnia pulex*), 7.100 PPM, 48 H, Intoxication. Results: No loss of equilibrium observed. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000

Results of PBT and vPvB assessment: No data available.

13. Disposal Considerations

Waste Disposal Method: Observe all federal, state, and local environmental regulations.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not regulated as a hazardous material.

DOT Hazard Class:

UN/NA Number:

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7782-63-0	Ferrous sulfate	No	Yes 1000 LB	No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

☐ Yes ☒ No Explosive	☒ Yes ☐ No Acute toxicity (any route of exposure)
☐ Yes ☒ No Flammable (gases, aerosols, liquid, or solid)	☒ Yes ☐ No Skin Corrosion or Irritation
☐ Yes ☒ No Oxidizer (liquid, solid or gas)	☒ Yes ☐ No Serious eye damage or eye irritation
☐ Yes ☒ No Self-reactive	☐ Yes ☒ No Respiratory or Skin Sensitization
☐ Yes ☒ No Pyrophoric (liquid or solid)	☐ Yes ☒ No Germ cell mutagenicity
☐ Yes ☒ No Pyrophoric gas	☐ Yes ☒ No Carcinogenicity
☐ Yes ☒ No Self-heating	☐ Yes ☒ No Reproductive toxicity
☐ Yes ☒ No Organic peroxide	☐ Yes ☒ No Specific target organ toxicity (single or repeated exposure)
☐ Yes ☒ No Corrosive to metal	☐ Yes ☒ No Aspiration Hazard
☐ Yes ☒ No Gas under pressure (compressed gas)	☐ Yes ☒ No Simple Asphyxiant
☐ Yes ☒ No In contact with water emits flammable gas	☐ Yes ☒ No (Health) Hazard Not Otherwise Classified (HNOC)
☐ Yes ☒ No Combustible Dust	
☐ Yes ☒ No (Physical) Hazard Not Otherwise Classified (HNOC)	

SAFETY DATA SHEET

Ferrous Sulfate Heptahydrate

Page: 5
 Printed: 11/28/2020
 Revision: 11/28/2018

16. Other Information

Revision Date: 11/28/2018

Hazard Rating System:

HEALTH	2
FLAMMABILITY	0
	0

HMIS: PPE

Flammability Instability



NFPA: Special Hazard

Additional Information About No data available.

This Product: