

# Iron II Sulfate Hydrate

## Material Safety Data Sheet

### Section 1. Product and Company Identification

**Product Name** Iron II Sulfate Hydrate

**Product Code** 0039675B

**Manufacturer** EMD Chemicals Inc.

P.O. Box 70  
480 Democrat Road  
Gibbstown, NJ 08027

Prior to January 1, 2003 EMD Chemicals Inc. was  
EM Industries, Inc. or EM Science, Division of  
EM Industries, Inc.

**Effective Date** 3/3/2003

#### For More Information Call

856-423-6300 Technical Service  
Monday-Friday: 8:00 AM - 5:00 PM

#### In Case of Emergency Call

800-424-9300 CHEMTREC  
(USA)  
613-996-6666 CANUTEC  
(Canada)  
24 Hours/Day: 7 Days/Week

**Synonym** IRON (II) SULFATE HYDRATE EXTRA PURE

**Material Uses** Analytical reagent.

**Chemical Family** Inorganic salt.

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### Section 2. Composition and Information on Ingredients

<b>Component</b>	<b>CAS #</b>	<b>% by Weight</b>
IRON II SULFATE HYDRATE	13463-43-9	100

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### Section 3. Hazards Identification

**Physical State and Appearance** Solid. (Crystals solid.)

**Emergency Overview** WARNING!

HARMFUL IF SWALLOWED.

CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.

**Routes of Entry** Absorbed through skin. Eye contact. Inhalation. Ingestion.

#### Potential Acute Health Effects

**Eyes** Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

**Skin** Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Inhalation** Hazardous in case of inhalation (lung irritant).

**Ingestion** Hazardous in case of ingestion.

#### Potential Chronic Health Effects

**Carcinogenic Effects** This material is not known to cause cancer in animals or humans.

Additional information See Toxicological Information (section 11)

**Medical Conditions Aggravated by Overexposure:** Repeated exposure to a highly toxic material may produce general

deterioration of health by an accumulation in one or many human organs.

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### Section 4. First Aid Measures

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
<b>Ingestion</b>	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

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### Section 5. Fire Fighting Measures

<b>Flammability of the Product</b>	Non-flammable.
<b>Auto-ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Products of Combustion</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	<b>Risks of explosion of the product in presence of static discharge:</b> No. <b>Risks of explosion of the product in presence of mechanical impact:</b> No.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Protective Clothing (Fire)</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

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### Section 6. Accidental Release Measures

<b>Small Spill and Leak</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
<b>Large Spill and Leak</b>	Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.
<b>Spill Kit</b>	No specific spill kit required for this product.

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### Information

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#### Section 7. Handling and Storage

<b>Handling</b>	Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing dust. Keep container closed. Wash thoroughly after handling.
<b>Storage</b>	Keep container in a cool, well-ventilated area.

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#### Section 8. Exposure Controls/Personal Protection

<b>Engineering Controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
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#### Personal Protection

<b>Eyes</b>	Splash goggles.
<b>Body</b>	Lab coat.
<b>Respiratory</b>	Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
<b>Hands</b>	Gloves.
<b>Feet</b>	Not applicable.

#### Protective Clothing

#### (Pictograms)

<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
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<b>Product Name</b>	<b>Exposure Limits</b>
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IRON II SULFATE HYDRATE Not available.

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#### Section 9. Physical and Chemical Properties

<b>Odor</b>	None.
<b>Color</b>	White.
<b>Physical State and Appearance</b>	Solid. (Crystals solid.)
<b>Molecular Weight</b>	Not available.
<b>Molecular Formula</b>	FeSO <sub>4</sub> · xH <sub>2</sub> O
<b>pH</b>	Not available.
<b>Boiling/Condensation Point</b>	Not available.
<b>Melting/Freezing Point</b>	Not available.
<b>Specific Gravity</b>	Not available.
<b>Vapor Pressure</b>	Not available.
<b>Vapor Density</b>	Not available.
<b>Odor Threshold</b>	Not available.
<b>Evaporation Rate</b>	Not available.
<b>LogKow</b>	Not available.
<b>Solubility</b>	Soluble in water.

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#### Section 10. Stability and Reactivity

The product is stable.

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### Stability and Reactivity

**Conditions of** Not available.

### Instability

**Incompatibility with** Reactive with oxidizing agents, acids, alkalis.

### Various Substances

**Rem/Incompatibility** Not available.

**Hazardous** Not available.

### Decomposition

### Products

**Hazardous** Will not occur.

### Polymerization

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## Section 11. Toxicological Information

### RTECS Number:

Iron(II) Sulfate, Hydrate, USP, BP, Not available.  
FCC, Ph Helv

**Toxicity** LD50: Not available.

LC50: Not available.

**Chronic Effects on** Not available.

### Humans

**Acute Effects on** Hazardous in case of eye contact (irritant). Inflammation of the eye is  
**Humans** characterized by redness, watering, and itching. Hazardous in case of skin  
contact (irritant). Skin inflammation is characterized by itching, scaling,  
reddening, or, occasionally, blistering. Hazardous in case of inhalation  
(lung irritant). Hazardous in case of ingestion.

**Synergetic Products** Not available.

### (Toxicologically)

**Irritancy** Draize Test: Not available.

**Sensitization** Not available.

**Carcinogenic** This material is not known to cause cancer in animals or humans.

### Effects

**Toxicity to** Not available.

### Reproductive

### System

**Teratogenic Effects** Not available.

**Mutagenic Effects** Not available.

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## Section 12. Ecological Information

**Ecotoxicity** Not available.

**BOD5 and COD** Not available.

**Toxicity of the** The products of degradation are less toxic than the product itself.

### Products of

### Biodegradation

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## Section 13. Disposal Considerations

**EPA Waste** Not available.

### Number

**Treatment** Material does not have an EPA Waste Number and is not a listed waste,  
however consultation with a permitted waste disposal site (TSD) should

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be accomplished. Always contact a permitted waste disposal (TSD) to assure compliance with all current local, state, and Federal Regulations.

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### Section 14. Transport Information

**DOT Classification** Not available.

**TDG Classification** Not available.

**IMO/IMDG** Not available.

**Classification**

**ICAO/IATA** Not available.

**Classification**

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### Section 15. Regulatory Information

**U.S. Federal Regulations** TSCA 8(b) inventory: IRON II SULFATE HYDRATE

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: No products were found.

SARA 311/312 MSDS distribution – chemical inventory – hazard identification: No products were found.

SARA 313 toxic chemical notification and release reporting: No products were found.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 accidental release prevention: No products were found.

Clean air act (CAA) 112 regulated flammable substances: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

**WHMIS (Canada)** Class D–2B: Material causing other toxic effects (TOXIC).  
No products were found.

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

#### International Regulations

**EINECS** Not available.

**DSCL (EEC)** R37/38– Irritating to respiratory system and skin.  
R41– Risk of serious damage to eyes.

**International Lists** Australia (NICNAS): IRON II SULFATE HYDRATE

**State Regulations** China: No products were found.  
No products were found.

California prop. 65: No products were found.

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### Section 16. Other Information

**National Fire Protection**

**0 Fire  
10 Hazard**

## Iron II Sulfate Hydrate

**Association  
(U.S.A.)**

**Health**

**Reactivity**

**Specific  
Hazard**

**Changed Since Last  
Revision** +

### **Notice to Reader**

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