MATERIAL SAFETY DATA SHEET

Ferrous Sulfate

MOIST HEPTAHYDRATE - DRIED HEPTAHYDRATE - MONOHYDRATE

Section I - Product Identification

Product/Material: Ferrous Sulfate; Moist Heptahydrate
Dried Heptahydrate & Monohydrate
Manufacturer's Name: QC Corporation
Address: Executive Centre at Hooks Lane
4 Reservoir Circle, Suite 105
Baltimore, Maryland 21208
Emergency Tel. No: (410) 486-0010
Checmtree Number: (800) 424-9300
Date Prepared: December 1, 1995
Prepared By: Eric Hyatt

Section II - Hazardous Ingredients

Ferrous Sulfate
FeSO₄ * H₂O
OSHA PEL: N.A.
ACGIH TLV (1979): Rat. Oral LD50: 1480 mg/m³
Other Limits: None

Section III - Physical Data

Boiling Point: Decomposition at 300°C
Vapor Pressure (mm Hg): O.
Vapor Density: N.A.
Solubility in Water: 57 gms. in 100 ml water @158°C
Appearance & Odor: Heptahydrate-Light Blue-Green, Acidic/Sour
Monohydrate-Light Gray, Acidic/Sour
Specific Gravity: 1.899 14°C / 8°C C
°Baumé: 68.64

Section IV - Fire and Explosion Hazard Data

Flash Point: None
Flammable Limits: N.A.
LEL: N.A.
UEL: N.A.
Extinguishing Media: N.A.
Special Firefighting Procedures: None or N.A.
Unusual Fire & Explosion Hazards: None

Section V - Reactivity Data

Stability: Stable
Incompatibility: Oxidizing Agents and Alkalis
Conditions to Avoid: Extremely high temperatures
Hazardous Decomposition or Byproducts:
Products of sulfur oxides, i.e.: SO₂ and SO₃
Hazardous Polymerization: Will not occur.

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation (Yes) Skin (Yes) Ingestion (Yes)

Health Hazards (Acute and Chronic):
Inhalation: Irritation to trachea and lungs, breathing difficulty.
Skin: Irritation to skin, very irritating to eyes.
Ingestion: G.I. tract irritation, shock, liver damage, tachycardia and death.
Carcinogenicity: Not established.

Signs and Symptoms of Exposure: Irritation or itching, stinging of eyes, breathing problems, stomach ache, acidic or sour taste.

Medical Conditions Generally Aggravated by Exposure: Dermatitis, asthma, conjunctivitis, stomach or digestive problems.

Emergency and First Aid Procedures:
Flood skin and eyes with water for 15 minutes minimum, remove to fresh air, cover if in shock, remove to physicians care.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: Sweep up and repackage or place in receptacle for future disposal.
Waste Disposal Method: Remove to properly designated landfill or, if in solution, precipitate with alkalai and filter off iron for removal to landfill with pH adjustments of the filtrate and discharge to sewer.
Precautions to be Taken in Handling and Storage: Wear gloves, safety goggles, breathing mask and coveralls when handling. Stored materials should be placed in a dry and reasonably tempered area, preferably below 75°C F.
Other Precautions: None

Section VIII - Control Measures

Respiratory Protection: Dust Mask
Ventilation: Local Exhaust - None; Special - None
Mechanical - None; Other - None
Work/Hygienic Practices: Available safety showers as well as end of shift clean-up facilities.

Protective Gloves: Work Gloves
Eye Protection: Safety Goggles
Clothing or Equipment: Coveralls