

MATERIAL SAFETY DATA SHEET

I PRODUCT IDENTIFICATION

Trade Name:	Iron II Sulfide	Synonyms:	Ferrous Sulfide
Chemical Family:	Metal sulfide	Formula:	FeS
CAS #:	1317-37-9		

II HAZARDOUS INGREDIENTS

Iron II Sulfide%: 100 **PEL:** None Established **TLV:** None Established

III PHYSICAL DATA

Boiling Point:	Decomposes	Freeze/Melting Point:	1195 °C
Vapor Density:	Not applicable	Vapor Pressure:	Essentially zero
% Volatiles:	0 %	Specific Gravity:	4.74 (H ₂ O=1)
Solubility in H₂O:	Insoluble	Appearance and Odor:	Black powder, no odor.

IV FIRE AND EXPLOSION HAZARDS DATA

Flash Point (Method used): N/A	Autoignition Temperature: No data
Flammable Limits: N/A Upper: N/A Lower: N/A	Unusual Fire & Explosion Hazard: N/A

Extinguishing Media: Flammable solid. Do not use water. Use dry chemical extinguishing agents, dry sand, or dry dolomite.

Special Fire Fighting Procedures: Finely powdered iron disulfide, especially in the presence of moisture, will rapidly heat spontaneously and ignite, particularly in contact with combustible materials. Use normal procedures which include wearing NIOSH/MSHA approved self-contained breathing apparatus, flame and chemical resistant clothing; hats, boots and gloves. If without risk, remove material from fire area.

V HEALTH HAZARD INFORMATION

OSHA (PEL): None established	ACGIH (TLV): None established
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Animal Toxicity: LD50: No data; LC50: No data; Other: No data

Effects of Exposure:

Acute Effects: Ingestion: May cause irritation to the gastrointestinal tract if swallowed.

Skin Contact: May cause irritation. Skin absorption is unlikely.

Eye Contact: May cause irritation.

Inhalation: May cause irritation.

Other Health Hazards: Little toxic action except through the liberation of hydrogen sulfide.

Most Likely Routes of Entry: Ingestion.

Chronic Effects: Ingestion: None known

Skin Contact: None known

Eye Contact: None known

Inhalation: None known

Other: Not listed as a carcinogen by IARC or NTP.

EMERGENCY AND FIRST AID PROCEDURES:

EYE: Immediately flush eyes, including under eyelids, with large amounts of water for at least 15 minutes. Call a physician.

SKIN: Remove contaminated clothing, flood skin with large amounts of water. If irritation persists seek medical attention.

INHALATION: No specific information available, one should obtain medical attention.

VI REACTIVITY DATA

Stability: Stable

Incompatibility (Material to Avoid): Lithium, steel, acids.

Hazardous Decomposition Products: Fumes of SO_x, H₂S.

Hazardous Polymerization: Will not occur

Environmental Information:

RCRA Code: D003

TSCA Registered: Yes

VII SPILL OR LEAK PROCEDURES

Steps to Be Taken in Case Material Is Released or Spilled: Wearing full protective equipment, cover spill with dry sand or vermiculite. Mix well and carefully transfer to a container.

Waste Disposal Method: Consult State, Local or Federal EPA regulations for proper disposal.

VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection: High efficiency particulate respirator.

Ventilation: Laboratory fume hood.

Protective Gloves: Rubber

Eye/Face Protection: ANSI approved safety goggles.

IX SPECIAL PRECAUTIONS

Other Handling and Storage Conditions: Keep container tightly closed. Store in a cool, dry, well ventilated area. Wash thoroughly after use. Lab coat and apron, flame and chemical resistant coveralls, eyewash capable of sustained flushing, safety drench shower and hygienic facilities for washing.

Issued: Steve Dierks

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