

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Trade Name:** Iron Disulfide

**Chemical Formula:** FeS<sub>2</sub>

**Manufacturer Item Number:** IR-2380

**Manufacturer:** Lorad Chemical Corporation  
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Saint Petersburg, Florida, 33713  
United States of America

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**Emergency Contact:** (800) 255-3924 (US & Canada)  
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**2. HAZARD IDENTIFICATION**

**Signal Word:** Danger

**Pictograms:**



**Hazard Statements:**

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statements:** **Prevention**

P261 Avoid breathing dust / fumes / gas / mist / vapors / spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves.

P285 In case of inadequate ventilation wear respiratory protection.

**Response**

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P333+313 In skin irritation or a rash occurs: Get medical advice / attention.

P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or physician.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

**Storage**

P402+404 Store in a dry place. Store in a closed container.

P405 Store locked up.

**Disposal**

P501 Dispose of contents / container at an approved waste disposal plant.

**Other Hazards****HMIS Ratings (0-4)**

- Health: 2  
- Flammability: 0  
- Physical: 0

**3. COMPOSITION**

**Additional Names:** Ferrous Disulfide

| Percentage: | Component      | Classification                                                   | Concentration |
|-------------|----------------|------------------------------------------------------------------|---------------|
|             | Iron Disulfide | Skin Sens. 1; H317, Resp. Sens. 1; H334, Aquatic Chronic 1; H410 | <= 100%       |

**CAS #:** 12068-85-8

**EC #:** 235-106-8

**4. FIRST AID PROCEDURES**

**General Treatment** Consult a physician. Show SDS to doctor in attendance. Move out of dangerous area.

**Special Treatment:** No data available.

**Important Symptoms:** No data available.

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Skin:** Wash off with soap and plenty of water. Consult a physician.

**Eyes:** Flush eyes with water as a precaution.

**5. FIREFIGHTING MEASURES**

**Special Hazards from Substance:** Sulfur Oxides, Hydrogen, Sulfide Iron Oxides

**Extinguishing Media:** Carbon dioxide, extinguishing powder or water spray. For larger fires, use water spray or alcohol resistant foam.

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus.

**6. ACCIDENTAL RELEASE MEASURES**

**If Material is Released / Spilled:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in closed container for disposal.

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**7. HANDLING AND STORAGE**

**Handling Conditions:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. This product is moisture sensitive so handle under inert gas.

**SAFETY DATA SHEET**

|                                     |                                                                                                                                                                                                                      |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage Conditions:</b>          | Keep container tightly sealed and stored in a cool, dry place. Do not store with acids. Store away from air, water/moisture and oxidizing agents.                                                                    |
| <b>Work / Hygienic Maintenance:</b> | Keep away from foodstuffs, beverages, and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Maintain an ergonomically appropriate working environment. |
| <b>Ventilation:</b>                 | Store away from air. Provide appropriate exhaust ventilation at places where dust is formed.                                                                                                                         |

**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

|                                     |                                                                                                                                                                                                                                                                                                                              |              |              |                                                           |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|-----------------------------------------------------------|
| <b>Permissible Exposure Limits:</b> | <b>Authority</b>                                                                                                                                                                                                                                                                                                             | <b>Basis</b> | <b>Limit</b> | <b>Remarks</b>                                            |
|                                     | -                                                                                                                                                                                                                                                                                                                            | -            | -            | Contains no substances with occupational exposure limits. |
| <b>Threshold Limit Value:</b>       | <b>Authority</b>                                                                                                                                                                                                                                                                                                             | <b>Basis</b> | <b>Limit</b> | <b>Remarks</b>                                            |
|                                     | -                                                                                                                                                                                                                                                                                                                            | -            | -            | Contains no substances with occupational exposure limits. |
| <b>Special Equipment:</b>           | Handle in accordance with good industrial hygiene and safety practice. Use proper lab equipment while handling this product. Keep away from incompatible materials for possible risk of hazardous reaction.                                                                                                                  |              |              |                                                           |
| <b>Respiratory Protection:</b>      | For nuisance exposure use type N95 or P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection, use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). |              |              |                                                           |
| <b>Protective Gloves:</b>           | Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.               |              |              |                                                           |
| <b>Eye Protection:</b>              | Safety glasses with side-shields or goggles. Use equipment for eye protection tested and approved under government standards such as NIOSH (US) or EN 166 (EU).                                                                                                                                                              |              |              |                                                           |
| <b>Body Protection:</b>             | Wear appropriate protective clothing.                                                                                                                                                                                                                                                                                        |              |              |                                                           |

**9. PHYSICAL AND CHEMICAL CHARACTERISTICS**

|                                        |                    |                                                |                    |
|----------------------------------------|--------------------|------------------------------------------------|--------------------|
| <b>Color:</b>                          | Gray               | <b>Molecular Weight:</b>                       | 119.98 g/mol       |
| <b>Forms:</b>                          | Powder             | <b>Theoretical Density:</b>                    | No Data Available. |
| <b>Odor:</b>                           | Odorless           | <b>pH:</b>                                     | No Data Available. |
| <b>Water Solubility:</b>               | No Data Available. | <b>Auto-Ignition Temperature:</b>              | No Data Available. |
| <b>Boiling Point:</b>                  | No Data Available. | <b>Evaporation Rate:</b>                       | No Data Available. |
| <b>Melting Point / Freezing Point:</b> | No Data Available. | <b>Flammability or Explosive Limits:</b>       | No Data Available. |
| <b>Vapor Pressure:</b>                 | No Data Available. | <b>Partition Coefficient: n-octanol/ water</b> | No Data Available. |
| <b>Vapor Density:</b>                  | No Data Available. | <b>Decomposition Temperature:</b>              | No Data Available. |
| <b>Flash Point:</b>                    | No Data Available. | <b>Viscosity:</b>                              | No Data Available. |

**10. REACTIVITY**

**Stability:** Stable under recommended storage conditions.

**Reacts with:** Contact with acids liberates toxic gas.

**Incompatible Conditions:** Water / moisture, Oxidizing agents, Air, Acids

**Hazardous Decomposition Products:** Sulfur Oxides, Hydrogen Sulfide, Iron Oxides

**11. TOXICOLOGICAL INFORMATION**

**Acute Toxicity**

Eyes: May cause irritation.

Skin: May cause irritation.

Ingestion: May cause irritation.

Inhalation: May cause allergy, asthma symptoms, or breathing difficulties.

**Chronic Toxicity**

Skin Corrosion / Irritation: No Data Available.

Serious Eye Damage / Irritation: No Data Available.

Respiratory / Skin Sensitization: No Data Available.

Mutagenic Effects: No Data Available.

Reproductive / Teratogenic Effects: No Data Available.

Specific Target Organ Toxicity: No Data Available.  
(single exposure)

Specific Target Organ Toxicity: No Data Available.  
(repeated exposure)

Aspiration Hazard: No Data Available.

Other Adverse Effects: May aggravate existing respiratory illness conditions. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Carcinogenicity:**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Additional Information:**

**12. ECOLOGICAL INFORMATION**

**Aquatic Toxicity:** Very toxic to aquatic life with long lasting effects.

**Persistence and degradability:** No Data Available.

**Bioaccumulative potential:** No Data Available.

**Notes:** Do not allow material to be released to the environment without proper governmental permits. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment.

### 13. DISPOSAL CONSIDERATIONS

**Disposal:** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Empty containers should be taken to an appropriate waste handling site for recycling or disposal. Dispose of in accordance with local, state, or national regulations.

### 14. TRANSPORTATION DATA

**Hazardous:** **DoT:** Not Dangerous Goods  
**IMDG:** Environmentally Hazardous Substance  
**IATA:** Environmentally Hazardous Substance

**Pictogram:**



**Hazard Class:** 9

**Packing Group:** III

**UN Number:** 3077

**US DoT** **Proper Name:** Not Dangerous Goods

Marine Pollutant: Yes

**IMDG** **Proper Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Iron Disulfide, ≥99.5% trace metals basis)

EMS-No: F-A, S-A

Marine Pollutant: Yes

**IATA** **Proper Name:** Environmentally hazardous substance, solid n.o.s. (Iron Disulfide, ≥ 99.5% trace metals basis)

### 15. REGULATORY INFORMATION

**Toxic Substance Control Act** Listed

**SARA 302 Components** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components** No material does not contain any chemical components with known CAS numbers that exceed the threshold (de minimus) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards** Acute Health Hazard

**Massachusetts Right to Know Components** No components are subject to Ma. Right to Know Act.

|                                              |                                                                                                                                              |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pennsylvania Right to Know Components</b> | Iron Disulfide, powder, -100 mesh (CAS No. 12068-85-8).                                                                                      |
| <b>New Jersey Right to Know Components</b>   | Iron Disulfide, powder, -100 mesh (CAS No. 12068-85-8).                                                                                      |
| <b>California Prop. 65 Components</b>        | This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm. |

## 16. OTHER INFORMATION

Copyright 2020 Lorad Chemical Corporation. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document does not constitute a hazard assessment and should not be used in place of the user's own assessment of work place risks as required by other health and safety legislation. The information in this sheet does not represent a guarantee of the properties of the product. Lorad Chemical Corporation and its Affiliates make no warranty with respect to the accuracy of the information or the suitability of this product for any particular application, and shall not be held liable for any damage resulting from handling or from contact with the above product.

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