Material Safety Data Sheet
Iron (II) Sulfide

MSDS# 09875

Section 1 - Chemical Product and Company Identification

MSDS Name: Iron (II) Sulfide
Catalog Numbers: I150-500
Synonyms: Ferrous sulfide
Company Identification: Fisher Scientific
Company Identification: One Reagent Lane
Company Identification: Fair Lawn, NJ 07410
For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>1317-37-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name</td>
<td>Iron (II) Sulfide</td>
</tr>
<tr>
<td>%</td>
<td>100</td>
</tr>
<tr>
<td>EINECS#</td>
<td>215-268-6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazard Symbols</th>
<th>XN</th>
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<table>
<thead>
<tr>
<th>Risk Phrases</th>
<th>32</th>
</tr>
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</table>

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! The toxicological properties of this material have not been fully investigated. May cause irritation. Target Organs: None.

Potential Health Effects

Eye: Dust may cause mechanical irritation.
Skin: May cause skin irritation.
Ingestion: May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.
Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.
Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media: For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

Autoignition Temperature: Not applicable.
Flash Point: Not applicable.
Explosion Limits: Not available

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

Section 7 - Handling and Storage

Handling: Use with adequate ventilation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron (II) Sulfide</td>
<td>1 mg/m³ TWA (as Fe) (listed under Iron salts (soluble))</td>
<td>1 mg/m³ TWA (as Fe) (listed under Iron salts (soluble))</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Iron (II) Sulfide: 1 mg/m³ TWA (as Fe) (listed under Iron salts (soluble))

Engineering Controls:
Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Color: gray to brown black
Odor: none reported
pH: Not available
Vapor Pressure: Not applicable.
Vapor Density: Not available
Evaporation Rate: Not applicable.
Viscosity: Not applicable.
Boiling Point: Decomposes.
Freezing/Melting Point: 1194 deg C (2,181.20°F)
Decomposition Temperature: Not available
Solubility in water: Insoluble in water.
Specific Gravity/Density: 4.84
Molecular Formula: FeS
Molecular Weight: 87.907

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Moisture, exposure to air, strong oxidants.
Incompatibilities with Other Materials: Not available
Hazardous Decomposition Products: Oxides of sulfur, hydrogen sulfide.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 1317-37-9: None listed
LD50/LC50: RTECS: Not available.
Carcinogenicity: Iron (II) Sulfide - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Not regulated as a hazardous material
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives
Hazard Symbols: XN
Risk Phrases:
R 32 Contact with acids liberates very toxic gas.
Safety Phrases:

WGK (Water Danger/Protection)
CAS# 1317-37-9: Not available

Canada
CAS# 1317-37-9 is listed on Canada's DSL List
Canadian WHMIS Classifications: D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS# 1317-37-9 is not listed on Canada's Ingredient Disclosure List.
CAS# 1317-37-9 is listed on the TSCA Inventory.

Section 16 - Other Information
MSDS Creation Date: 12/12/1997
Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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