1. Identification

Product Name: Iron Metal Filings, Fine
Cat No.: I57-500
Synonyms: None
Recommended Use: Laboratory chemicals.

Uses advised against: No Information available

Company: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number:
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable solids: Category 2

Label Elements

Signal Word: Warning

Hazard Statements
Flammable solid

Precautionary Statements
Prevention
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Wear protective gloves/protective clothing/eye protection/face protection

**Fire**
In case of fire: Use CO2, dry chemical, or foam for extinction
Fight fire with normal precautions from a reasonable distance

**Storage**
Store locked up

**Hazards not otherwise classified (HNOC)**
None identified

### 3. Composition / information on ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>7439-89-6</td>
<td>&gt;95</td>
</tr>
</tbody>
</table>

### 4. First-aid measures

**Eye Contact**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact**
Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

**Inhalation**
Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.

**Ingestion**
Do not induce vomiting. Obtain medical attention.

**Most important symptoms/effects**
No information available.

**Notes to Physician**
Treat symptomatically

### 5. Fire-fighting measures

**Suitable Extinguishing Media**
Dry sand; approved class D extinguishers.

**Unsuitable Extinguishing Media**
Do not use halogenated extinguishing agents or foam; Water; Carbon dioxide (CO2); Dry chemical

**Flash Point**
No information available

**Method -**
No information available

**Autoignition Temperature**
No information available

**Explosion Limits**
Upper: No data available
Lower: No data available

**Sensitivity to Mechanical Impact**
No information available

**Sensitivity to Static Discharge**
No information available

**Specific Hazards Arising from the Chemical**
Flammable. Risk of ignition. Dust can form an explosive mixture in air. Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**
Hydrogen

**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**
Iron Metal Filings, Fine

6. Accidental release measures

**Personal Precautions**
Use personal protective equipment. Remove all sources of ignition. Avoid dust formation.
Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

**Environmental Precautions**
Avoid release to the environment. See Section 12 for additional ecological information.

**Methods for Containment and Clean Up**
Remove all sources of ignition. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

7. Handling and storage

**Handling**
Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation.
Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation.

**Storage**
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Flammables area.

8. Exposure controls / personal protection

**Exposure Guidelines**
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures**
Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection**
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 and body protection**
Wear appropriate protective gloves and clothing to prevent skin exposure.

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

**Hygiene Measures**
Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical State</strong></td>
<td>Solid</td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td>Dark grey</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Odorless</td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Melting Point/Range</strong></td>
<td>1535 °C / 2795 °F</td>
</tr>
<tr>
<td><strong>Boiling Point/Range</strong></td>
<td>3000 °C / 5432 °F</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Evaporation Rate</strong></td>
<td>negligible</td>
</tr>
<tr>
<td><strong>Flammability (solid,gas)</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Flammability or explosive limits</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Upper</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Lower</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>No information available</td>
</tr>
</tbody>
</table>
Iron Metal Filings, Fine

10. Stability and reactivity

Reactive Hazard
None known, based on information available.

Stability
Moisture sensitive.

Conditions to Avoid
Avoid dust formation. Incompatible products. Heat, flames and sparks. Exposure to moist air or water.

Incompatible Materials
Strong oxidizing agents, Acids, Halogens, halogenated agents.

Hazardous Decomposition Products
Hydrogen.

Hazardous Polymerization
Hazardous polymerization does not occur.

Hazardous Reactions
None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>7500 mg/kg (Rat)</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Toxicologically Synergistic Products
No information available.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Irritation
No information available.

Sensitization
No information available.

Carcinogenicity
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>7439-89-6</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Mutagenic Effects
No information available.

Reproductive Effects
No information available.

Developmental Effects
No information available.

Teratogenicity
No information available.

STOT - single exposure
None known.

STOT - repeated exposure
None known.

Aspiration hazard
No information available.

Symptoms / effects, both acute and chronic.
No information available.
delayed

Endocrine Disruptor Information
No information available

Other Adverse Effects
The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

### 12. Ecological information

**Ecotoxicity**
This product contains the following substance(s) which are hazardous for the environment.

<table>
<thead>
<tr>
<th>Component</th>
<th>Freshwater Algae</th>
<th>Freshwater Fish</th>
<th>Microtox</th>
<th>Water Flea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>Not listed</td>
<td>13.6 mg/L LC50 96 h</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

**Persistence and Degradability**
No information available

**Bioaccumulation/ Accumulation**
No information available.

**Mobility**
No information available.

### 13. Disposal considerations

**Waste Disposal Methods**
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

**DOT**

- UN-No: UN3089
- Proper Shipping Name: METAL POWDERS, FLAMMABLE, N.O.S.
- Hazard Class: 4.1
- Packing Group: III

**TDG**

- UN-No: UN3089
- Proper Shipping Name: METAL POWDER, FLAMMABLE, N.O.S.
- Hazard Class: 4.1
- Packing Group: III

**IATA**

- UN-No: UN3089
- Proper Shipping Name: METAL POWDER, FLAMMABLE, N.O.S.
- Hazard Class: 4.1
- Packing Group: III

**IMDG/IMO**

- UN-No: UN3089
- Proper Shipping Name: METAL POWDER, FLAMMABLE, N.O.S.
- Hazard Class: 4.1
- Packing Group: III

### 15. Regulatory information

**International Inventories**

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>NLP</th>
<th>PICCS</th>
<th>ENCS</th>
<th>AICS</th>
<th>IECSC</th>
<th>KECL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>231-096-4</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Legend:
- X - Listed
- E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P - Indicates a commenced PMN substance
- R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable
SARA 313 Not applicable

SARA 311/312 Hazardous Categorization

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

Clean Water Act Not applicable
Clean Air Act Not applicable
OSHA Occupational Safety and Health Administration
Not applicable

CERCLA
Not applicable

California Proposition 65
This product does not contain any Proposition 65 chemicals

State Right-to-Know Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade
No information available

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class
B4 Flammable solid

16. Other information