SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Ferric(ous) Oxide, Black

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25321

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:
AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:
Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:
Fisher Science Education   Emergency Telephone No.: 800-535-5053

SECTION 2: Hazards identification

Classification of the substance or mixture:
Not classified for physical or health hazards under GHS.

Hazard statements:

Precautionary statements:
If medical advice is needed, have product container or label at hand
Keep out of reach of children
Read label before use

GHS:
Not a hazardous substance or mixture according to Regulation.

Other Non-GHS Classification:

SECTION 3: Composition/information on ingredients

Ingredients:
Ferric(ous) Oxide, Black

CAS 1317-61-9
Iron(II,III) oxide 100 %
Percentages are by weight

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Immediately get medical assistance.

After skin contact: Seek medical attention if irritation persists or if concerned. Flush the skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

After eye contact: Protect unexposed eye. Rinse or flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. Occasionally lift the upper and lower eyelids while rinsing. Get medical assistance.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Never give anything by mouth to an unconscious person. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Immediately get medical assistance.

Most important symptoms and effects, both acute and delayed:


Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically. No specific antidote exists.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Use water to keep surrounding containers cool.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Additional information (precautions): Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Wear protective eyewear, gloves, and clothing. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Sweep up and containerize for disposal. Avoid generating dust. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Keep in suitable closed containers for disposal. Remove all sources of ignition.

Reference to other sections:

Created by Global Safety Management, Inc. - Tel: 1-813-435-5161 - www.gsmsds.com
SECTION 7 : Handling and storage

Precautions for safe handling:
Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Wash hands after handling. Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink, smoke, or use personal products when handling chemical substances. Minimize dust generation and accumulation. Avoid ingestion and inhalation.

Conditions for safe storage, including any incompatibilities:
Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

SECTION 8 : Exposure controls/personal protection

Control Parameters: No applicable occupational exposure limits

Appropriate Engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin: Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection: Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Safety glasses or goggles are appropriate eye protection.

General hygienic measures: Perform routine housekeeping. Wash hands before breaks and at the end of work. Avoid contact with skin, eyes, and clothing. Before wearing wash contaminated clothing.

SECTION 9 : Physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance (physical state, color):</th>
<th>Black spherical solid</th>
<th>Explosion limit lower:</th>
<th>Non Explosive</th>
<th>Explosion limit upper:</th>
<th>Non Explosive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor:</td>
<td>Odorless</td>
<td>Vapor pressure:</td>
<td>Not Determined</td>
<td>Vapor density:</td>
<td>Not Determined</td>
</tr>
</tbody>
</table>
**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Effective date**: 01.20.2015

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**Ferric(ous) Oxide, Black**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH-value</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>1,589 °C</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Flash point (closed cup)</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Flammability (solid,gaseous)</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Relative density</td>
<td>4.8 - 5.1 g/mL at 25 °C</td>
</tr>
<tr>
<td>Solubilities</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Auto/Self-ignition temperature</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not Determined</td>
</tr>
</tbody>
</table>
| Viscosity                        | a. Kinematic: Not Determined  
b. Dynamic: Not Determined |
| Density                          | Not Determined                             |
| Molecular Weight                 | 231.54                                     |

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**SECTION 10 : Stability and reactivity**

**Reactivity**: Nonreactive under normal conditions.

**Chemical stability**: Stable under normal conditions.

**Possible hazardous reactions**: None under normal processing.

**Conditions to avoid**: Incompatible materials. High temperatures.

**Incompatible materials**: Aluminum, Calcium hypochlorite, Cesium carbide, Ethylene oxide, Strong acids, Peroxides, Chloroformates.

**Hazardous decomposition products**: Iron oxides. Irritating and toxic gases.

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**SECTION 11 : Toxicological information**

**Acute Toxicity**

<table>
<thead>
<tr>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50 Oral - Rat - male and female - &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>1317-61-9</td>
</tr>
</tbody>
</table>

**Chronic Toxicity**: No additional information.

**Corrosion Irritation**: No additional information.

**Sensitization**: No additional information.

**Single Target Organ (STOT)**: No additional information.

**Numerical Measures**: No additional information.

**Carcinogenicity**: No additional information.

**Mutagenicity**: No additional information.

**Reproductive Toxicity**: No additional information.

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**SECTION 12 : Ecological information**

**Ecotoxicity Persistence and degradability**

**Bioaccumulative potential**: No additional information.

**Mobility in soil**: No additional information.

**Other adverse effects**: No additional information.
SECTION 13 : Disposal considerations

Waste disposal recommendations:
Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). 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. Ensure complete and accurate classification.

SECTION 14 : Transport information

UN-Number
Not Regulated

UN proper shipping name
Not Regulated

Transport hazard class(es)
Not Regulated

Packing group: Not Regulated

Environmental hazard:

Transport in bulk:

Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):
None of the ingredients is listed

SARA Section 313 (Specific toxic chemical listings):
None of the ingredients is listed

RCRA (hazardous waste code):
None of the ingredients is listed

TSCA (Toxic Substances Control Act):
All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):
None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:
None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed

Chemicals known to cause developmental toxicity:
None of the ingredients is listed
Canada

**Canadian Domestic Substances List (DSL):**
All ingredients are listed.

**Canadian NPRI Ingredient Disclosure list (limit 0.1%):**
None of the ingredients is listed

**Canadian NPRI Ingredient Disclosure list (limit 1%):**
None of the ingredients is listed

### SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**GHS Full Text Phrases:**

**Abbreviations and acronyms:**
- IMDG: International Maritime Code for Dangerous Goods
- PNEC: Predicted No-Effect Concentration (REACH)
- CFR: Code of Federal Regulations (USA)
- SARA: Superfund Amendments and Reauthorization Act (USA)
- RCRA: Resource Conservation and Recovery Act (USA)
- TSCA: Toxic Substances Control Act (USA)
- NPRI: National Pollutant Release Inventory (Canada)
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- WHMIS: Workplace Hazardous Materials Information System (Canada)
- DNEL: Derived No-Effect Level (REACH)

**Effective date:** 01.20.2015  
**Last updated:** 03.19.2015