## Iron Filings, 80 Mesh

## SECTION 1: Identification

### Product identifier

**Product name:** Iron Filings, 80 Mesh
**Product code:** IF5080

### Recommended use of the product and restriction on use

**Relevant identified uses:** Laboratory chemicals
**Uses advised against:** Not determined or not applicable.
**Reasons why uses advised against:** Not determined or not applicable.

### Manufacturer or supplier details

**Manufacturer:**
**United States**
AquaPhoenix Scientific, Inc.
860 Gitts Run Road
Hanover, PA 17331
1-717-632-1291

### Emergency telephone number:

**United States**
**ChemTel**
800-255-3924
1-813-248-0585

## SECTION 2: Hazard identification

### GHS classification:

Flammable solids, category 1

### Label elements

**Hazard pictograms:**

**Signal word:** Danger

### Hazard statements:

H228 Flammable solid

### Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/light/equipment
P280 Wear protective gloves/protective clothing/eye protection/face protection
P370+P378 In case of fire: Use agents recommended in section 5 for extinction

**Hazards not otherwise classified:** None

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## SECTION 3: Composition/information on ingredients

| Identification | Name | Weight % |
|---|---|---|
| CAS number: 7439-89-6 | Iron | >97 |

**Additional Information:** None

## SECTION 4: First-aid measures

### Description of first-aid measures

**General notes:**
Not determined or not available.

**After inhalation:**
Loosen clothing as necessary and position individual in a comfortable position
Maintain an unobstructed airway
Get medical advice/attention if you feel unwell

**After skin contact:**
Rinse affected area with soap and water
If symptoms develop or persist, seek medical attention

**After eye contact:**
Rinse/flush exposed eye(s) gently using water for 15-20 minutes
If symptoms develop or persist, seek medical attention

**After ingestion:**
Rinse mouth thoroughly
Seek medical attention if irritation, discomfort, or vomiting persists

### Most important symptoms and effects, both acute and delayed

**Acute symptoms and effects:**
Not determined or not available.

**Delayed symptoms and effects:**
Not determined or not available.

### Immediate medical attention and special treatment

**Specific treatment:**
Not determined or not available.

**Notes for the doctor:**
Not determined or not available.

## SECTION 5: Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media:**
Use dry chemical

**Unsuitable extinguishing media:**
Do not use water, foam, or carbon dioxide as an extinguisher

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

**Special protective equipment for firefighters:**
Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

**Special precautions:**
Shut off sources of ignition
Carbon monoxide and carbon dioxide may form upon combustion
Heating causes a rise in pressure, risk of bursting and combustion

## SECTION 6: Accidental release measures

**Personal precautions, protective equipment and emergency procedures:**
Ensure adequate ventilation
Ensure air handling systems are operational
Wear protective eye wear, gloves and clothing

**Environmental precautions:**
Should not be released into the environment
Prevent from reaching drains, sewer or waterway

**Methods and material for containment and cleaning up:**
Wear protective eye wear, gloves and clothing
Use spark-proof tools and explosion-proof equipment
Sweep or scoop up solid material while minimizing dust generation
Dispose of contents / container in accordance with local regulations

**Reference to other sections:**
Not determined or not applicable.

## SECTION 7: Handling and storage

**Precautions for safe handling:**
Use only with adequate ventilation.
Avoid breathing dust.
Do not eat, drink, smoke or use personal products when handling chemical substances.
Take precautionary measures against electrostatic discharges.

**Conditions for safe storage, including any incompatibilities:**
Keep container tightly sealed.
Keep container dry.
Store in a cool, well-ventilated area.
Store away from all ignition sources (open flames, hot surfaces, direct sunlight, spark sources).

## SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

**Occupational Exposure limit values:**
No occupational exposure limits noted for the ingredient(s).

**Biological limit values:**
No biological exposure limits noted for the ingredient(s).

**Information on monitoring procedures:**
Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.
Biological monitoring may also be appropriate for some substances.

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**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.

Use explosion-proof ventilation equipment.

**Personal protection equipment**

**Eye and face protection:**

Safety goggles or glasses, or appropriate eye protection.

**Skin and body protection:**

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

**Respiratory protection:**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

**General hygienic measures:**

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

Wash contaminated clothing before reuse.

## SECTION 9: Physical and chemical properties

**Information on basic physical and chemical properties**

| | |
|---|---|
| **Appearance (physical state, color):** | Black to gray solid |
| **Odor:** | Not determined or not available. |
| **Odor threshold:** | Not determined or not available. |
| **pH-value:** | Not determined or not available. |
| **Melting/Freezing point:** | 1535 °C |
| **Boiling point/range:** | 2750 °C |
| **Flash point:** | Not determined or not available. |
| **Evaporation rate:** | Negligible |
| **Flammability (solid, gaseous):** | Not determined or not available. |
| **Explosion limit upper:** | Not determined or not available. |
| **Explosion limit lower:** | Not determined or not available. |
| **Vapor pressure:** | 1 mmHg at 1787 °C |
| **Vapor density:** | Not determined or not available. |
| **Density:** | Not determined or not available. |
| **Relative density:** | 7.86 at 20 °C |
| **Solubilities:** | Insoluble in water. |
| **Partition coefficient (n-octanol/water):** | Not determined or not available. |
| **Auto/Self-ignition temperature:** | Not determined or not available. |
| **Decomposition temperature:** | Not determined or not available. |
| **Dynamic viscosity:** | Not determined or not available. |
| **Kinematic viscosity:** | Not determined or not available. |

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| | |
|---|---|
| **Explosive properties** | Not determined or not available. |
| **Oxidizing properties** | Not determined or not available. |

**Other information**

| | |
|---|---|
| **Molecular weight** | 55.847 |

## SECTION 10: Stability and reactivity

**Reactivity:**
Does not react under normal conditions of use and storage.

**Chemical stability:**
Stable under normal conditions of use and storage.

**Possibility of hazardous reactions:**
None under normal conditions of use and storage.

**Conditions to avoid:**
None known.

**Incompatible materials:**
None known.

**Hazardous decomposition products:**
None known.

## SECTION 11: Toxicological information

**Acute toxicity**
**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.

**Skin corrosion/irritation**
**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.

**Serious eye damage/irritation**
**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.

**Respiratory or skin sensitization**
**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.

**Carcinogenicity**
**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.
**International Agency for Research on Cancer (IARC):** None of the ingredients are listed.
**National Toxicology Program (NTP):** None of the ingredients are listed.

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**Germ cell mutagenicity**

**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.

**Reproductive toxicity**

**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.

**Specific target organ toxicity (single exposure)**

**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.

**Specific target organ toxicity (repeated exposure)**

**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.

**Aspiration toxicity**

**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.

**Information on likely routes of exposure:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:** No data available.

**Other information:** No data available.

## SECTION 12: Ecological information

**Acute (short-term) toxicity**

**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.

**Chronic (long-term) toxicity**

**Product data:** No data available.
**Substance data:** No data available.

**Persistence and degradability**

**Product data:** No data available.
**Substance data:** No data available.

**Bioaccumulative potential**

**Product data:** No data available.
**Substance data:** No data available.

**Mobility in soil**

**Product data:** No data available.
**Substance data:** No data available.

**Other adverse effects:** No data available.

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## SECTION 13: Disposal considerations

**Disposal methods:**

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

## SECTION 14: Transport information

**Canadian Transportation of Dangerous Goods (TDG)**

| | |
|---|---|
| **UN number** | UN3089 |
| **UN proper shipping name** | Metal Powders, Flammable, N.O.S. |
| **UN transport hazard class(es)** | 4.1  |
| **Packing group** | II |
| **Environmental hazards** | None |
| **Special precautions for user** | None |

**International Maritime Dangerous Goods (IMDG)**

| | |
|---|---|
| **UN number** | UN3089 |
| **UN proper shipping name** | Metal Powders, Flammable, N.O.S. |
| **UN transport hazard class(es)** | 4.1  |
| **Packing group** | II |
| **Environmental hazards** | None |
| **Special precautions for user** | None |

**International Air Transport Association Dangerous Goods Regulations (IATA-DGR)**

| | |
|---|---|
| **UN number** | UN3089 |
| **UN proper shipping name** | Metal Powders, Flammable, N.O.S. |
| **UN transport hazard class(es)** | 4.1  |
| **Packing group** | II |
| **Environmental hazards** | None |
| **Special precautions for user** | None |

## SECTION 15: Regulatory information

**Canada regulations**

**Domestic substances list (DSL):**

| | | |
|---|---|---|
| 7439-89-6 | Iron | Listed |

**Non-domestic substances list (NDSL):** Not determined.

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## SECTION 16: Other information

**Abbreviations and Acronyms:** None

**Disclaimer:**

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

**NFPA:** 2-1-1

**HMIS:** 2-1-1

**Initial preparation date:** 02.21.2018

**End of Safety Data Sheet**