# **Safety Data Sheet**



Issue Date: 01-May-2015 Revision Date: 19-Oct-2015 Version 1

## 1. IDENTIFICATION

**Product Identifier** 

Product Name IRON POWER

Other means of identification

**SDS #** BRG-002

Synonyms Iron (II) Sulfate monohydrate. Ferrous Sulfate monohydrate.

Recommended use of the chemical and restrictions on use

Recommended Use Plant Nutrients.

Details of the supplier of the safety data sheet

Supplier Address BR Global LLC 150 Roundabout Ct. Rocky Mount, NC 27804

Emergency Telephone Number

**Company Phone Number** Phone: 252-442-0700 Fax: 252-442-0787

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

# 2. HAZARDS IDENTIFICATION

Appearance Slightly gray green powder

Physical State Solid

**Odor** Odorless

#### Classification

or granular

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

#### **Unknown Acute Toxicity**

90% of the mixture consists of ingredient(s) of unknown toxicity

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which, at their given concentration, are considered to be hazardous to health. However, additional component information is available in subsequent sections of this SDS.

Synonyms Iron (II) Sulfate monohydrate. Ferrous Sulfate monohydrate.

Formula FeSO4.H2O

Chemical Name	CAS No	Weight-%
Iron (II) Sulfate monohydrate	17375-41-6	90

# 4. FIRST-AID MEASURES

First Aid Measures

**Eye Contact** In case of eye contact, immediately flush with plenty of water for at least 15 minutes. If

symptoms persist, seek medical attention.

Skin Contact Remove contaminated clothing, wash thoroughly before reuse. Wash skin thoroughly with

mild soap and water. If symptoms persist, call a physician.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention for any

breathing difficulty.

**Ingestion** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by

mouth to an unconscious person. Seek medical attention.

# Most important symptoms and effects

**Symptoms** May cause irritation to the eyes, skin, gastrointestinal, and respiratory systems. May cause

central nervous system effects.

# Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

#### Specific Hazards Arising from the Chemical

Not considered to be a fire hazard. Not considered to be an explosion hazard.

Hazardous Combustion Products Sulfur oxides. Iron oxides.

#### 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.

## 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required. Avoid creating dust.

**Environmental Precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See

Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

## Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up

Sweep, scoop or vacuum (use only if equipment is specifically designed for handling

combustible dusts). Flush spill area with water, avoiding sewers, water courses, basements or confined areas. Ventilate closed spaces before entering. Do not reuse any product that has been spilled, as it could be contaminated or lessen the effectiveness of the product for its intended uses. Do not reuse container after spill, see disposal considerations. Clean up in accordance with all applicable regulations. Notify appropriate governmental agencies if there is a danger to the public or if there is a reportable release to the environment.

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Use personal protective equipment as required. Use with adequate ventilation. Do not eat, drink or smoke when handling this product. Protect container from physical damage. Avoid generation of dust. Do not breathe dust. Wash face, hands, and

any exposed skin thoroughly after handling.

#### Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not store

at high temperatures. Store away from incompatible materials.

Incompatible Materials Acid halides and anhydrides, phosphorus halides, chlorides.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Iron (II) Sulfate monohydrate	TWA: 1 mg/m <sup>3</sup> Fe	(vacated) TWA: 1 mg/m³ Fe	TWA: 1 mg/m <sup>3</sup> Fe
17375-41-6			

### Appropriate engineering controls

**Engineering Controls** Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

#### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Safety glasses with side shields or chemical goggles. Refer to 29 CFR 1910.133 for eye

and face protection regulations.

**Skin and Body Protection** Wear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate

skin and body protection.

Respiratory Protection Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation

wear respiratory protection. Refer to 29 CFR 1910.134 for respiratory protection

requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Wash face, hands and any exposed skin thoroughly after

handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Physical State Solid

AppearanceSlightly gray green powder or granular<br/>ColorOdor<br/>Odor ThresholdOdorlessColorSlightly gray greenOdor ThresholdNot determined

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH Not determined
Melting Point/Freezing Point
Boiling Point/Boiling Range Not determined

Flash Point Not considered to be a fire hazard

**Evaporation Rate** Not determined Flammability (Solid, Gas) Not determined **Upper Flammability Limits** Not determined **Lower Flammability Limit** Not determined **Vapor Pressure** Not determined Vapor Density Not determined Specific Gravity Not determined Water Solubility Not determined Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dvnamic Viscosity** Not determined

**Explosive Properties**Does not present an explosion hazard

Oxidizing Properties Not determined

### 10. STABILITY AND REACTIVITY

# Reactivity

Not reactive under normal conditions.

#### **Chemical Stability**

Stable under recommended storage conditions.

# Possibility of Hazardous Reactions

None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

#### **Conditions to Avoid**

See Sec. 7 Handling & Storage.

#### **Incompatible Materials**

Acid halides and anhydrides, phosphorus halides, chlorides.

### **Hazardous Decomposition Products**

Sulfur oxides. Iron oxides.

# 11. TOXICOLOGICAL INFORMATION

# Information on likely routes of exposure

**Product Information** 

**Eye Contact** Avoid contact with eyes.

**Skin Contact** Avoid contact with skin.

**Inhalation** Avoid inhalation of dust.

**Ingestion** Do not ingest.

#### Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

# Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or

potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity** 

Not determined

**Unknown Acute Toxicity** 90% of the mixture consists of ingredient(s) of unknown toxicity.

## 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<u>Component Information</u> Not available

#### Persistence/Degradability

Not determined.

#### **Bioaccumulation**

Not determined.

#### **Mobility**

Not determined

#### **Other Adverse Effects**

Not determined

## 13. DISPOSAL CONSIDERATIONS

#### **Waste Treatment Methods**

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

# 14. TRANSPORT INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

**DOT** Not regulated

IATA Not regulated

**IMDG** Not regulated

# 15. REGULATORY INFORMATION

#### **International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Iron (II) Sulfate monohydrate										Х

#### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

# US Federal Regulations

#### **SARA 313**

Not determined

## **US State Regulations**

# **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

# U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Iron (II) Sulfate monohydrate			X
17375-41-6			

# **16. OTHER INFORMATION**

**Health Hazards** NFPA **Flammability** Instability **Special Hazards** Not determined Not determined Not determined Not determined **HMIS Health Hazards Flammability Physical Hazards Personal Protection** Not determined Not determined Not determined Not determined

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## **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release 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 or in any process, unless specified in the text.

**End of Safety Data Sheet**