Section 1. Identification

Product identifier
Iron Granules

CAS-No.: 17375-41-6

Other means of identification
Synonyms
Iron (II) Sulfate

Recommended use
Deficiency corrections and pH lowering of soils

Uses advised against
No information available

Company
Southern Agricultural Insecticides, Inc.
P.O. Box 218
Palmetto, FL 34220

Company Telephone/Fax
(941) 722-3285/(941) 723-2974

Emergency Telephone Number
For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night: 1-800-424-9300

Section 2. Hazards identification

Classification
Acute Toxicity, Oral Category 4
Skin irritation Category 2
Eye Irritation Category 2A

GHS Label elements, including precautionary statements
Pictogram:

Signal word: Warning
Hazard statement(s):
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.

Precautionary statement(s):
Wash skin thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Wear protective gloves/eye protection/face protection.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see supplemental first aid instructions on this label).
Rinse mouth.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Remove contaminated clothing and wash before reuse.  
Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC): None

Section 3. Composition/information on ingredients

Substances

Synonyms: Ferrous Sulfate Monohydrate  
Formula: FeSO₄·H₂O  
Molecular Weight: 169.92 g/mol  
CAS-No.: 17375-41-6  
Weight %: >99%

Hazardous components
Component: Ferrous Sulfate Monohydrate  
Classification: Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A

Section 4. First Aid Measures

Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.  
Move out of dangerous area.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labelling (see Section 2.2) and/or in Section 11.

Indication of any immediate medical attention and special treatment needed: No data available.

Section 5. Firefighting Measures

Extinguishing media

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

Special hazards arising from the substance or mixture: Sulphur oxides, Iron oxides.

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further information: The product itself does not burn.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see Section 8.

Environmental precautions: Do not let product enter drains.

Methods and materials for containment and cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections: For disposal see Section 13.

Section 7. Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. For precautions see Section 2.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place. Air sensitive. Store under inert gas. Hygroscopic.

Specific end use(s): Apart from the uses mentioned in Section 1 no other specific uses are stipulated.

### Section 8. Exposure and Controls/Personal Protection

#### Control Parameters

**Components with workplace control parameters**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous sulfate Monohydrate</td>
<td>17375-41-6</td>
<td>TWA</td>
<td>mg/m3</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Remarks</td>
<td>Upper Respiratory Tract &amp; skin irritation varies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TWA 1 mg/m3 USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TWA 1 mg/m3 USA. NIOSH Recommended Exposure Limits</td>
</tr>
</tbody>
</table>

**Exposure Controls**

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal Protective Equipment

**Eye/face protection:** Safety glasses with side-shields.

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body protection:** Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** For nuisance exposures use a particle respirator. For higher level protection use type, wear NIOSH approved air-purifying respirator with cartridges/canisters. Control of environmental exposure: Do not let product enter drains.

### Section 9. Physical and Chemical Properties

**Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Grey, acidic/sour</td>
</tr>
<tr>
<td>Color</td>
<td>Grey</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>3.0 – 4.0 @ 50 g/l @ 25º C (77º F)</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>Melting point/range: 64º C (147º F) Loses water</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Section 10. Stability and Reactivity

Reactivity: No data available.
Chemical Stability: Stable under recommended storage conditions.
Possibility of Hazardous Reactions: No data available.
Hazardous: Polymerization: No data available.
Conditions to Avoid: No data available.
Incompatible Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Other decomposition products – no data available. In the event of a fire see Section 5.

Section 11. Toxicological information

Information on likely routes of exposure
Product information
- Inhalation: No data available
- Eye contact: No data available
- Skin contact: No data available
- Ingestion: Harmful if swallowed

Component Information

Information on toxicological effects
Symptoms: No data available

Delayed and immediate effects as well as chronic effects from short & long-term exposure
- Sensitization: No data available.
- Mutagenic effects: No data available.
- Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Numerical measure of toxicity product information
The following values are calculated based on Section 3 of the GHS document: No data available.

Section 12. Ecological Information
Ecotoxicity: No data available.
Persistence and Degradability: No data available.
Bioaccumulation: No data available.
Other adverse effects: No data available.

Section 13. Disposal Considerations
Waste treatment methods
Disposal methods Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging Dispose of as unused product.

Section 14. Transport Information
DOT (US)
UN Number: 3077 Class: 9 Packing group: III
Proper shipping name Environmentally hazardous substance, solid, n.o.s.
(Ferrous Sulfate Monohydrate)
Reportable Quantity (RQ): 1,000 lbs
Marine pollutant: No
Poison Inhalation Hazard: No
IMDG Not dangerous goods.
IATA Not dangerous goods.

Section 15. Regulatory Information
INTERNATIONAL INVENTORIES
TSCA: CAS# 17375-41-6 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS# for the anhydrous form is on the inventory (40CFR720.3(u)(2)).
CAS# 17375-41-6 is listed on the TSCA Inventory.
DSL: CAS# 17375-41-6 is listed on Canada’s DSL List.

US Federal Regulations
SARA 313: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA + Title III, Section 313.

SARA 311/312 Hazard Categories: Acute health hazard
Chronic health hazard
CWA (Clean Water Act) Section 311 Hazardous Substances (40 CFR 117.3)
Sulfuric acid, Iron (2) salt (1:1), Monohydrate
Reportable quantity: 1000 lbs.
CERCLA  
(40 CFR 302.4)  
Sulfuric acid, Iron (2) salt (1:1), Monohydrate  
Reportable quantity: 1000 lbs.

US State Regulations

**California Prop. 65 Components**  
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

US State Right-to-Know Regulations

**Massachusetts Right-to-Know Components:**  
Ferrous Sulfate Monohydrate  
CAS-No. 17375-41-6  
Revision Date: 1993-04-24

**Pennsylvania Right-to-Know Components:**  
Ferrous Sulfate Monohydrate  
CAS-No. 17375-41-6  
Revision Date: 1993-04-24

**New Jersey Right-to-Know Components:**  
Ferrous Sulfate Monohydrate  
CAS-No. 17375-41-6  
Revision Date: 1993-04-24

International Regulations

**Canada**  
WHMIS Hazard Class:  
Uncontrolled product; Disclosure at 1%.

Section 16. Other Information

**NFPA Rating**  
Health hazard: 2  
Fire Hazard: 0  
Reactivity Hazard: 0

**HMIS Rating**  
Health hazard: 2  
Chronic Health Hazard: Flammability: 0  
Physical Hazard: 0

Section 16: Other Information

Southern Agricultural Insecticides, Inc. recommends that each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown below. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer’s/user’s responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user’s duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.

Date Issued: March 30, 2016