Safety Data Sheet

Section 1: Identification

Product identifier

Product Name • Lilly Miller Moss Out! Lawn Granules
Synonyms • 100099162; 100099164; EPA Reg. No.: 802-543
Product Description • Gray to black granules.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use • Mossicide.
Restrictions on use • Avoid prolonged contact with eyes, skin, and clothing; Keep out of the reach of children. Use in well ventilated area. Do not take internally.

Details of the supplier of the safety data sheet

Manufacturer • Lilly Miller Brands
1000 Parkwood Circle, Suite 700
Atlanta, GA 30339
United States
www.mossout.com

Emergency telephone number

Manufacturer • 1-800-265-0761
Manufacturer (Transportation) • 1-800-424-9300 - CHEMTREC
Manufacturer (Transportation) • 1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted

Section 2: Hazard Identification

United States (US)
According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Acute Toxicity Oral 4
Eye Irritation 2A
Skin Irritation 2

Label elements

OSHA HCS 2012

WARNING
Hazard statements

• Harmful if swallowed
  Causes serious eye irritation
  Causes skin irritation

Precautionary statements

Prevention

• Wash thoroughly after handling.
  Do not eat, drink or smoke when using this product.
  Wear protective gloves/eye protection/face protection.

Response

• IF SWALLOWED: Call poison control center or doctor if you feel unwell.
  Rinse mouth.
  IF ON SKIN: Wash with plenty of soap and water.
  Take off contaminated clothing and wash before reuse.
  If skin irritation or rash occurs: Get medical advice/attention.
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,
  if present and easy to do. Continue rinsing.
  If eye irritation persists: Get medical advice/attention.

Storage/Disposal

• Dispose of content and/or container in accordance with local, regional, national, and/or
  international regulations.

Other hazards

OSHA HCS 2012

  Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

• Material does not meet the criteria of a substance.

Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous Sulfate Monohydrate</td>
<td>CAS:17375-41-6</td>
<td>32%</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>NDA</td>
<td>Balance</td>
</tr>
</tbody>
</table>

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

• IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a
  position comfortable for breathing. Get medical attention if symptoms occur.

Skin

• IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get
  medical advice/attention.

Eye

• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,
if present and easy to do. Continue rinsing.

Ingestion

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Have person sip a glass of water if able to swallow. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Causes serious eye irritation, causes skin irritation. Harmful if swallowed. Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media

Use water fog, foam, carbon dioxide, or dry chemical.

Unsuitable Extinguishing Media

Avoid heavy hose streams.

Firefighting Procedures

Stay upwind.
Move containers from fire area if you can do it without risk.
Dike far ahead of spill to collect runoff water.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

No data available

Hazardous Combustion Products

Decomposes upon heating to produce toxic gases including iron oxides, sulfur oxides.

Advice for firefighters

Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Avoid any skin contact. Avoid contact with eyes. Use appropriate Personal Protective Equipment (PPE)

Emergency Procedures

Keep out of low areas. Stay upwind. Avoid release into the environment. Do not allow runoff into water, storm drains or drainage ditches.

Environmental precautions

Avoid release to the environment.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

Carefully shovel or sweep up spilled material and place in suitable container for later disposal.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

Use good safety and industrial hygiene practices. Avoid contact with skin or eyes. Wash thoroughly with soap and water after handling. See product label for additional
Conditions for safe storage, including any incompatibilities

Storage
- Store in cool, dry, secure place. Keep out of reach of children. Keep only in the original container. Avoid excessive heat.

Incompatible Materials or Ignition Sources
- Strong acids, strong bases, and oxidizing agents.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines
- No data available.

<table>
<thead>
<tr>
<th>Lilly Miller Moss Out! Lawn Granules</th>
<th>Result</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWAs</td>
<td>10 mg/m3 TWA (inhalable particles, recommended); 3 mg/m3 TWA (respirable particles, recommended) as Particulates not otherwise classified (PNOC)</td>
<td></td>
<td>15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) as Particulates not otherwise classified (PNOC)</td>
</tr>
</tbody>
</table>

Exposure Limits Supplemental

OSHA
- Lilly Miller Moss Out! Lawn Granules as Particulates not otherwise classified (PNOC): Mineral Dusts: (15 mppcf TWA (respirable fraction); 5 mg/m3 TWA (respirable fraction); 50 mppcf TWA (total dust); 15 mg/m3 TWA (total dust))

Exposure controls

Engineering Measures/Controls
- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Personal Protective Equipment

Pictograms
- Respiratory
  - In case of insufficient ventilation, use NIOSH approved respiratory protection.
- Eye/Face
  - Wear chemical splash safety goggles.
- Hands
  - Wear appropriate gloves.
- Skin/Body
  - It is recommended for handlers to wear appropriate clothing to prevent skin contact including long sleeves, long pants, socks and shoes.

Environmental Exposure Controls
- Refer to Section 13 - Disposal Considerations.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Solid</th>
<th>Appearance/Description</th>
<th>Gray to black granules.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Form</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Gray to black.</td>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
<td>Physical and Chemical Properties</td>
<td>No data available</td>
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</tbody>
</table>
### General Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>No data available</td>
<td>Melting Point/Freezing Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
<td>pH</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>No data available</td>
<td>Bulk Density</td>
<td>60 to 70 lb(s)/ft³</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Insoluble</td>
<td>Viscosity</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Volatility</td>
<td>No data available</td>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td>VOC (Wt.)</td>
<td>No data available</td>
</tr>
<tr>
<td>VOC (Vol.)</td>
<td>No data available</td>
<td>Flash Point</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Flammability</td>
<td>UEL</td>
<td>LEL</td>
<td>No data available</td>
</tr>
<tr>
<td>Environmental</td>
<td>Octanol/Water Partition coefficient</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

### Section 10: Stability and Reactivity

**Reactivity**

- Non-reactive under normal handling and storage conditions.

**Chemical stability**

- Stable under normal temperatures and pressures.

**Possibility of hazardous reactions**

- Hazardous polymerization will not occur.

**Conditions to avoid**

- Avoid humid, moist or wet conditions. Excessive heat.

**Incompatible materials**

- Strong acids, strong bases, reducing agents, oxidizers, ammonium nitrate, halogens, steel, aluminum, zinc and copper. May be corrosive to mild steel and slightly corrosive to aluminum, zinc, or copper.

**Hazardous decomposition products**

- Decomposes upon heating to produce toxic gases including sulfur oxides and iron oxides.

### Section 11 - Toxicological Information

**Information on toxicological effects**

<table>
<thead>
<tr>
<th>Components</th>
<th>Acute Toxicity: Ingestion/Oral-Rat • 319 mg/kg; Irritation: Eye-Species unspecified • Moderate irritation; Skin-Species unspecified • Moderate irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous Sulfate Monohydrate (32%)</td>
<td>17375-41-6</td>
</tr>
</tbody>
</table>

**GHS Properties**

<table>
<thead>
<tr>
<th>Classification</th>
<th>GHS Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>OSHA HCS 2012</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Acute toxicity</td>
<td>Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral 4</td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
<td>Skin Irritation 2</td>
</tr>
<tr>
<td>Serious eye damage/Irritation</td>
<td>Eye Irritation 2A</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Classification criteria not met</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>Classification criteria not met</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>Classification criteria not met</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Classification criteria not met</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>Classification criteria not met</td>
</tr>
<tr>
<td>Toxicity for Reproduction</td>
<td>Classification criteria not met</td>
</tr>
<tr>
<td>STOT-SE</td>
<td>Classification criteria not met</td>
</tr>
<tr>
<td>STOT-RE</td>
<td>Classification criteria not met</td>
</tr>
</tbody>
</table>

### Potential Health Effects

**Inhalation**
- **Acute (Immediate)**
  - Exposure to dust may cause mild respiratory irritation.
- **Chronic (Delayed)**
  - No data available

**Skin**
- **Acute (Immediate)**
  - Causes skin irritation.
- **Chronic (Delayed)**
  - No data available

**Eye**
- **Acute (Immediate)**
  - Causes serious eye irritation.
- **Chronic (Delayed)**
  - No data available

**Ingestion**
- **Acute (Immediate)**
  - Harmful if swallowed.
- **Chronic (Delayed)**
  - No data available

**Mutagenic Effects**
- No data available.

**Carcinogenic Effects**
- No component of this product present at 0.1% or greater is listed by IARC, OSHA or NTP.

**Reproductive Effects**
- No data available.

### Section 12 - Ecological Information

**Toxicity**
- No data available

**Persistence and degradability**
- No data available

**Bioaccumulative potential**
- No data available

**Mobility in Soil**
- No data available

**Other adverse effects**
- No data available.
Section 13 - Disposal Considerations

Waste treatment methods

Product waste
• Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste
• Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. See product label for disposal instructions.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>DOT</th>
<th>UN number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class (es)</th>
<th>Packing group</th>
<th>Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UN3077</td>
<td>Packaging 119 lbs. or greater: Environmentally hazardous substance, solid, n.o.s (Ferrous Sulfate Monohydrate)</td>
<td>9</td>
<td>III</td>
<td>RQ = Ferrous Sulfate Monohydrate 1,000 lbs.</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>Not Applicable</td>
<td>Not Regulated</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>Not Applicable</td>
<td>Not Regulated</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Special precautions for user
• None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
• No data available

Other information

DOT
• Environmental Hazards: RQ Ferrous Sulfate Monohydrate = 1,000 lbs.

IMO/IMDG
• No data available

IATA/ICAO
• No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications
• Acute

FIFRA – Pesticide Labeling

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION

Precautionary Statements

Hazards to Humans and Domestic Animals
Causes eye irritation. Do not get in eyes, on skin or clothing. Harmful if swallowed, inhaled or absorbed through skin. Avoid breathing dust. Remove contaminated clothing.
and wash before reuse. Wash thoroughly with soap and water after handling and before eating or smoking. Do not allow persons or pets in treated areas until granules have been watered in and treated area is dry.

First Aid •

F SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice. IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. IF INHALED: Remove person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

Environmental Hazards •

Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous Sulfate Monohydrate</td>
<td>17375-41-6</td>
<td>No</td>
</tr>
</tbody>
</table>

Section 16 - Other Information

Revision Date • 08/February/2016

Last Revision Date • 08/February/2016

Preparation Date • 08/February/2016

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