

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**
- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition		
Chemical Name	Identifiers	%
Ferrous Sulfate Monohydrate	CAS:17375-41-6	32%
Other ingredients	NDA	Balance

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

information.

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.

Exposure Limits/Guidelines			
	Result	ACGIH	OSHA
Lilly Miller Moss Out! Lawn Granules	TWAs	10 mg/m ³ TWA (inhalable particles, recommended); 3 mg/m ³ TWA (respirable particles, recommended) <i>as Particulates not otherwise classified (PNOC)</i>	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction) <i>as Particulates not otherwise classified (PNOC)</i>

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

Material Description			
Physical Form	Solid	Appearance/Description	Gray to black granules.
Color	Gray to black.	Odor	Odorless
Odor Threshold	No data available	Physical and Chemical Properties	No data available

General Properties

Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	No data available	Bulk Density	60 to 70 lb(s)/ft ³
Water Solubility	Insoluble	Viscosity	Not relevant

Volatility

Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available	VOC (Wt.)	No data available
VOC (Vol.)	No data available		

Flammability

Flash Point	Not relevant	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		

Environmental

Octanol/Water Partition coefficient	No data available		
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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**

Components		
Ferrous Sulfate Monohydrate (32%)	17375-41-6	Acute Toxicity: Ingestion/Oral-Rat • 319 mg/kg; Irritation: Eye-Species unspecified • Moderate irritation; Skin-Species unspecified • Moderate irritation

GHS Properties**Classification**

Acute toxicity	OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral 4
Skin corrosion/Irritation	OSHA HCS 2012 • Skin Irritation 2
Serious eye damage/Irritation	OSHA HCS 2012 • Eye Irritation 2A
Skin sensitization	OSHA HCS 2012 • Classification criteria not met
Respiratory sensitization	OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	OSHA HCS 2012 • Classification criteria not met
Toxicity for Reproduction	OSHA HCS 2012 • Classification criteria not met
STOT-SE	OSHA HCS 2012 • Classification criteria not met
STOT-RE	OSHA HCS 2012 • Classification criteria not met

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

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

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 • KEEP OUT OF THE REACH OF CHILDREN.

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.

Inventory		
Component	CAS	TSCA
Ferrous Sulfate Monohydrate	17375-41-6	No

Section 16 - Other Information

Revision Date	• 08/February/2016
Last Revision Date	• 08/February/2016
Preparation Date	• 08/February/2016
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