



Lilly Miller Moss Out! For Roofs & Structures

Safety Data Sheet

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Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Substance
Trade name : Lilly Miller Moss Out! For Roofs & Structures
Synonyms : 100099150, 100099152, 100099153, 100099154, EPA Reg. No.: 802-591, UPC #: 070624-10605-1, UPC #: 0-70624-10615-0

1.2. Recommended use and restrictions on use

Recommended use : To kill or prevent moss growth.
Restrictions on use : Avoid contact with skin and eyes. Keep out of reach of children. Do NOT take internally.

1.3. Supplier

Lilly Miller Brands
1000 Parkwood Circle, Suite 700
Atlanta, GA 30339 - United States

www.mossout.com

1.4. Emergency telephone number

Emergency number : 1-800-265-0761
1-800-424-9300 - CHEMTREC
1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral) Category 4 Harmful if swallowed
Serious eye damage/eye irritation Category 1 Causes serious eye damage

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

Harmful if swallowed
Causes serious eye damage

Precautionary statements (GHS US) :

Wash hands, forearms and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center or doctor if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center or doctor.
Rinse mouth.
Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : This product is toxic to fish and aquatic invertebrates. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

2.4. Unknown acute toxicity (GHS US)

Not applicable

Lilly Miller Moss Out! For Roofs & Structures

Safety Data Sheet

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%
Sulfuric acid, zinc salt (1:1), monohydrate	(CAS-No.) 7446-19-7	99
Non-hazardous and/or does not meet criteria for classification	(CAS-No.) N/A	1

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: 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 and attention.
First-aid measures after ingestion	: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Harmful if swallowed.

4.3. Immediate medical attention and special treatment, if necessary

Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage. Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing agent suitable for surrounding fire.
Unsuitable extinguishing media	: Avoid heavy hose streams.

5.2. Specific hazards arising from the chemical

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
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5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Keep unauthorized personnel away. Do not allow fire fighting water to escape into waterways or sewers. Stay upwind. Ventilate closed spaces before entering. Do not breathe gas/fumes/vapor/spray.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Avoid contact with skin, eyes and clothing. Ventilate spillage area. Wear appropriate personal protective equipment, avoid direct contact. Avoid dust formation. Do not breathe dust.
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6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. Positive pressure self-contained breathing apparatus (SCBA).
Emergency procedures	: Ventilate area. Wear appropriate personal protective equipment, avoid direct contact. Stop release. Stay upwind. Evacuate unnecessary personnel. Do NOT wash away into sewer. Avoid release to the environment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Shovel or sweep up and put in a closed container for disposal. Avoid dust formation. Use appropriate PPE.
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Lilly Miller Moss Out! For Roofs & Structures

Safety Data Sheet

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store in original container. Avoid excess heat. Avoid humid, wet or moist conditions. Do not store near strong acids, oxidizing agents, hazardous or toxic substances.
- Incompatible materials : Strong oxidizers. Strong bases. Strong acids.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

- Appropriate engineering controls : Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

It is recommended for handlers to wear appropriate clothing to prevent skin contact including long sleeves, long pants, socks and shoes.

Respiratory protection:

In case of insufficient ventilation, use NIOSH approved respiratory protection.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Appearance : White powder
- Color : White
- Odor : No data available
- Odor threshold : No data available
- pH : 3 – 5
- Melting point : No data available
- Freezing point : Not applicable
- Boiling point : 500 °C (932 °F)
- Flash point : Not applicable
- Relative evaporation rate (butyl acetate=1) : No data available
- Flammability (solid, gas) : Non-flammable
- Vapor pressure : No data available

Lilly Miller Moss Out! For Roofs & Structures

Safety Data Sheet

Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 50 lb/cu ft - 105 lb/cu ft
Solubility	: Soluble
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not applicable
Explosion limits	: Not applicable
Explosive properties	: Not explosive
Oxidizing properties	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid extreme temperatures. Avoid humid, moist or wet conditions.

10.5. Incompatible materials

Strong acids. Strong oxidizing agents. Strong bases.

10.6. Hazardous decomposition products

Non-combustible, substance itself does not burn but may decompose upon heating to produce toxic fumes which may include oxides of sulfur and zinc.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Lilly Miller Moss Out! For Roofs & Structures	
LD50 oral	926 mg/kg

GHS-US Properties	Classification
Acute toxicity (oral)	Harmful if swallowed.
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Causes serious eye damage.
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	Not classified

Potential health effects

Inhalation

Acute : May cause respiratory tract irritation.

Lilly Miller Moss Out! For Roofs & Structures

Safety Data Sheet

Chronic : Prolonged exposure to high levels of dust can cause metallic taste thirst, coughing, fatigue, weakness, muscular pain, and nausea followed by fever and chills.

Skin

Acute : May cause skin irritation.

Chronic : Prolonged or repeated contact may cause dermatitis or irritation.

Eye

Acute : Causes serious eye damage.

Ingestion

Acute : Harmful if swallowed.

Mutagenicity : Not classified.

Carcinogenicity : Not classified.

Reproductive Effects : Not classified.

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Other adverse effects

Lilly Miller Moss Out! For Roofs & Structures

Ecological Fate : This product is toxic to fish and aquatic organisms.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

SECTION 14: Transport information

	UN number	Proper Shipping Name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	Not regulated	Not regulated	Not regulated	Not regulated	Not applicable
IMDG	UN3077	Packaging greater than 5 kg: Environmentally hazardous substance, solid, n.o.s (Zinc sulphate monohydrate)	9	III	Marine pollutant
IATA	UN3077	Packaging greater than 5 kg: Environmentally hazardous substance, solid, n.o.s (Zinc sulphate monohydrate)	9	III	Acute aquatic toxicity

SECTION 15: Regulatory information

15.1. US Federal regulations

Sulfuric acid, zinc salt (1:1), monohydrate (7446-19-7)

CERCLA RQ : 1000 lb

EPA Labelling

EPA Registration Number : 802-591

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.

FIFRA Hazard statements : **Danger**

FIFRA Precautionary statements : KEEP OUT OF REACH OF CHILDREN.

Lilly Miller Moss Out! For Roofs & Structures

Safety Data Sheet

FIFRA Hazards to Humans and Domestic Animals	Corrosive. Causes irreversible eye damage. Harmful if swallowed, absorbed through skin or inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing dust or spray mist. Wear goggles. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse. Do not allow persons or pets in treated areas until dusts have settled or sprays have dried.
FIFRA First aid	IF 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 the 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 eye. Call poison control center or doctor for treatment advice. IF ON SKIN OR CLOTHING: 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 by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.
FIFRA Environmental hazards	This product is toxic to fish and aquatic invertebrates. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters.

15.2. US State regulations

No additional information available

SECTION 16: Other information

Date of issue : 12 February 2016
Revision date : 30 March 2021

SDS US (GHS HazCom 2012) - CGP

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