United States

Material Safety Data Sheet

Miracle-Gro Lawn Products Inc.
14111 Scottslawn Road
Marysville, Ohio 43041
United States

24 h. EMERGENCY TELEPHONE NUMBER
CHEMTREC (U.S.) 1-800-424-9300
CHEMTREC (International) 1-703-527-3887
Non-Emergency Calls
1-937-644-0011

MIRACLE-GRO GARDEN SOIL ROSES 0.10-0.09-0.07

1. Product and company identification

MSDS # : 320000005547

2. Hazards identification

Physical state : solid
Color : Various
Odor : Earthy odor
OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Emergency Overview
Keep out of reach of children.

Potential acute health effects

Inhalation : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.
Skin : No known significant effects or critical hazards.
Eyes : No known significant effects or critical hazards.

Potential chronic health effects : See section 11 for more information.

Over-exposure signs/symptoms

Inhalation : No specific data.
Ingestion : No specific data.
Skin : No specific data.
Eyes : No specific data.

Medical conditions aggravated by over-exposure : Pre-existing skin disorders may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

3. Composition/information on ingredients
There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

**Eye contact**: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.

**Skin contact**: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.

**Inhalation**: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur.

**Ingestion**: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

**Notes to physician**: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

**Flammability of the product**: No specific fire or explosion hazard.

**Extinguishing media**

- **Suitable**: Use an extinguishing agent suitable for the surrounding fire.
- **Not suitable**: None known.

**Special exposure hazards**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Hazardous thermal decomposition products**: No specific data.

**Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

**Personal precautions**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see Section 8).

**Environmental precautions**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods for cleaning up**

- **Small spill**: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste
Large spill: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Storage: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Occupational exposure limits

No exposure standard allocated. Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected equipment.
Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes: Protective eyewear is not required, but may be used in situations were contact is expected.

Skin: No special protective clothing is required.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>solid</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Burning time</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammable limits</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Density</td>
<td>35 lb/ft³</td>
</tr>
<tr>
<td>Color</td>
<td>Various</td>
</tr>
<tr>
<td>Odor</td>
<td>Earthy odor</td>
</tr>
<tr>
<td>pH</td>
<td>5.5 - 6.0</td>
</tr>
<tr>
<td>Boiling/condensation point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Volatility</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Chemical stability: The product is stable.

Conditions to avoid: No specific data.

Incompatible materials: No specific data.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

Conclusion/Summary: No known significant effects or critical hazards.
**Irritation/Corrosion**

<table>
<thead>
<tr>
<th>Skin</th>
<th>Non-irritating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>May cause eye irritation.</td>
</tr>
<tr>
<td>Respiratory</td>
<td>May cause respiratory irritation</td>
</tr>
</tbody>
</table>

**Sensitizer**

<table>
<thead>
<tr>
<th>Conclusion/Summary</th>
<th>Skin</th>
<th>Not sensitizing - based on the individual components.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Respiratory</td>
<td>Not sensitizing - based on the individual components.</td>
</tr>
</tbody>
</table>

**Chronic toxicity**

Conclusion/Summary: No known significant effects or critical hazards.

**Carcinogenicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conclusion/Summary: No known significant effects or critical hazards.

**Mutagenicity**

Conclusion/Summary: No known significant effects or critical hazards.

**Teratogenicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

Conclusion/Summary: No known significant effects or critical hazards.

**Reproductive toxicity**

Conclusion/Summary: No known significant effects or critical hazards.

**12. Ecological information**

**Ecotoxicity**

: No known significant effects or critical hazards.

**Aquatic ecotoxicity**

Conclusion/Summary: No known significant effects or critical hazards.

**Persistence/degradability**

Conclusion/Summary: No known significant effects or critical hazards.

**Partition coefficient: n-octanol/water**

: No known significant effects or critical hazards.

**Other adverse effects**

: No known significant effects or critical hazards.

**13. Disposal considerations**

Waste disposal: Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. Transport information**

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN no.</th>
<th>Proper shipping name</th>
<th>Class</th>
<th>PG*</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report version.Report version</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Version: Date of issue/Date of revision:</td>
<td></td>
<td>Date of previous issue:</td>
<td></td>
<td></td>
<td>08/09/2013</td>
</tr>
</tbody>
</table>
15. Regulatory information

### United States

**U.S. Federal regulations**
- **United States - TSCA 12(b) - Chemical export notification**: None of the components are listed.
- **United States - TSCA 8(a) - Inventory update rule (IUR)**: Not determined
- **SARA 302/304/311/312 extremely hazardous substances**: No products were found.
- **SARA 302/304 emergency planning and notification**: No products were found.
- **SARA 302/304/311/312 hazardous chemicals**: No products were found.
- **SARA 311/312 MSDS distribution - chemical inventory - hazard identification**: No products were found.
- **United States - EPA Clean water act (CWA) section 311 - Hazardous substances**: Listed Sulfuric acid, iron(2+) salt (1:1)

**United States inventory (TSCA 8b)**: All components are listed or exempted.

### State regulations

**Massachusetts**: None of the components are listed.

**New York**: None of the components are listed.

**New Jersey**: None of the components are listed.

**Pennsylvania**: None of the components are listed.

**California Prop. 65**: Not available.

### International regulations

**Canada inventory**: At least one component is not listed.

**International lists**
- **Australia inventory (AICS)**: At least one component is not listed.
- **Taiwan inventory (CSNN)**: Not determined.
- **Malaysia Inventory (EHS Register)**: Not determined.
- **Japan inventory**: At least one component is not listed.
- **China inventory (IECSC)**: At least one component is not listed.
Korea inventory: At least one component is not listed.
New Zealand Inventory of Chemicals (NZIoC): At least one component is not listed.
Philippines inventory (PICCS): At least one component is not listed.

16. Other information

Hazardous Material Information System (U.S.A.):

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Physical hazards</td>
<td>0</td>
</tr>
</tbody>
</table>

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The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.):

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Date of printing : Print date
Date of issue : Validity date***

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