Material Safety Data Sheet

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

MIRACLE GRO EVERGREEN FERTILIZER SPIKES 12-6-12

1. Product and company identification

| MSDS #         | 320000003036 |

2. Hazards identification

<table>
<thead>
<tr>
<th>Physical state</th>
<th>solid [Compressed Spike]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Fertilizer</td>
</tr>
<tr>
<td>Signal word</td>
<td>No signal word.</td>
</tr>
<tr>
<td>OSHA/HCS status</td>
<td>This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).</td>
</tr>
</tbody>
</table>

Emergency Overview
Keep out of reach of children.

Potential acute health effects

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Skin</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Eyes</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Target organs</td>
<td>Contains material which causes damage to the following organs: gastrointestinal tract eyes</td>
</tr>
</tbody>
</table>

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

Over-exposure signs/symptoms

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Skin</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Eyes</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Medical conditions aggravated by over-exposure</td>
<td>Pre-existing skin disorders may be aggravated by over-exposure to this product.</td>
</tr>
</tbody>
</table>

See toxicological information (Section 11)

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
</table>
4. First aid measures

Eye contact: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation: Move 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.

Ingestion: 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. Never give anything by mouth to an unconscious person.

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: Decomposition products may include the following materials:
halogenated compounds
metal oxide/oxides

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: 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: No specific hazard.

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 disposal contractor.

Large spill: Vacuum or sweep up material and place in container for disposal. Never place down drain.
7. Handling and storage

Handling : Avoid inhalation or contact with skin, eyes or clothing. Avoid container breakage. Do not contaminate water sources when disposing of equipment washwater or rinsate. Keep out of lakes, stream or ponds. Keep out of reach of children.

Storage : Store in original container in a cool, dry, well-ventilated area inaccessible to children and pets. Do not contaminate food or feedstuffs.

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.

Engineering measures : Use adequate ventilation to keep the airborne concentrations below the recommended exposure standard.

Hygiene measures : Wash thoroughly with soap and water after handling. Remove and launder contaminated clothing before reuse.

Personal protection

Respiratory : No special respiratory protection required. If ventilation is inadequate to keep the airborne concentrations below the recommended exposure standard wear appropriate respiration protection.

Hands : Protective gloves are not required, but may be used in situations were significant contact is expected.

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

Physical state : solid [Compressed Spike]
Flash point : Not Applicable
 Burning time : Not Applicable
 Auto-ignition temperature : Not Applicable
 Flammable limits : Not Applicable
 Density : 60 lb/ft³
 Odor : Fertilizer
 pH : Not Applicable
 Boiling/condensation point : Not Applicable
 Melting/freezing point : Not Applicable
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**
- **Skin**: Non-irritating
- **Eyes**: May cause eye irritation.
- **Respiratory**: May cause respiratory irritation

**Sensitizer**
- **Conclusion/Summary**: Skin - Not sensitizing - based on the individual components. Respiratory - Not sensitizing - based on the individual components.

**Chronic toxicity**
- **Conclusion/Summary**: No known significant effects or critical hazards.

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

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

**Teratogenicity**
- **Product/ingredient name**
  - **Result**
  - **Species**
  - **Dose**
  - **Exposure**
- **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

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>DOT</td>
<td></td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IATA (C)</td>
<td></td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IATA (P)</td>
<td></td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td></td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDG</td>
<td></td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PG* : Packing group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Regulatory information

International regulations

Canada inventory : At least one component is not listed.

International lists :

- **Australia inventory (AICS)**: At least one component is not listed.
- **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.) :
Health | 1
Flammability | 0
Physical hazards | 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material.

Date of printing : Print date
Date of issue : Validity date***.
Version : Report version

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.