MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Miracle-Gro® Water Soluble All Purpose Plant Food, 24-8-16
Description: Water Soluble Fertilizer

Company
The Scotts Company
14111 Scottslawn Road
Marysville, OH 43041

Formula No.: S10385

2. HAZARDS IDENTIFICATION

OSHA Regulatory Status: This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Precautionary Statement
Keep out of reach of children.

Potential health effects
Eye contact: Contact with eyes may cause irritation.
Skin contact: Irritation not expected. Irritation possible.
Ingestion: Considered practically non-toxic. Possible gastrointestinal tract irritation.
Inhalation: May cause irritation of respiratory tract.

Aggravated Medical Conditions: Inhalation may aggravate asthma.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>di-Sodium-EDTA</td>
<td>139-33-3</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Potassium Phosphate</td>
<td>7778-77-0</td>
<td>10-30</td>
</tr>
<tr>
<td>Boric acid, H3BO3</td>
<td>10043-35-3</td>
<td>0.1-1.0</td>
</tr>
<tr>
<td>Sodium molybdate, Na2MoO4+2H2O</td>
<td>7631-95-0</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Iron EDTA</td>
<td>15708-41-5</td>
<td>1.0-5.0</td>
</tr>
<tr>
<td>Manganese EDTA</td>
<td>15375-84-5</td>
<td>0.1-1.0</td>
</tr>
<tr>
<td>Potassium chloride, KCl</td>
<td>7447-40-7</td>
<td>10-30</td>
</tr>
<tr>
<td>Copper sulphate, CuSO4</td>
<td>7758-98-7</td>
<td>0.1-1.0</td>
</tr>
<tr>
<td>Zinc Sulfate</td>
<td>7733-02-0</td>
<td>0.1-1.0</td>
</tr>
<tr>
<td>Ammoniumsulphate, (NH4)2SO4</td>
<td>7783-20-2</td>
<td>10-30</td>
</tr>
<tr>
<td>Urea</td>
<td>57-13-6</td>
<td>30-60</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Eye contact: 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 a poison control center or doctor for treatment advice

Skin contact: 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

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. Do not give anything by mouth to an unconscious person

Inhalation: Move 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

Revision date: 08-Jun-2005
5. FIRE-FIGHTING MEASURES

Flammable properties: Decomposes on heating.
Suitable extinguishing media: Water spray, carbon dioxide, dry chemical, chemical foam
Explosion potential: Dust clouds may be explosive.
Explosive properties: No information available.
Hazardous combustion products: Combustion can produce toxic fumes and irritating gases.
Fire fighting procedures: Select appropriate method to surround and extinguish fire
Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear personal protective equipment
Environmental precautions: Prevent product from entering drains
Methods for containment: Use good housekeeping practices. Clean up promptly by sweeping or vacuum.
Methods for cleaning up: If material is uncontaminated, collect and reuse as recommended for product.

7. HANDLING AND STORAGE

Handling: Avoid container breakage
Storage: Keep containers tightly closed in a cool, well-ventilated place

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components | ACGIH: | OSHA:
---|---|---
Ammoniumsulphate, (NH4)2SO4 | Not Listed | Not Listed
Potassium Phosphate | Not Listed | Not Listed
Potassium chloride, KCl | Not Listed | Not Listed
Urea | Not Listed | Not Listed
Boric acid, H3BO3 | 2 mg/m³ TWA inhalable fraction, listed under borate compounds, inorganic | Not Listed
Manganese EDTA | 0.2 mg/m³ TWA | Not Listed
Iron EDTA | 1 mg/m³ TWA as Fe | Not Listed
Copper sulphate, CuSO4 | 0.2 mg/m³ TWA fume | 0.1 mg/m³ TWA fume
 | 1 mg/m³ TWA dusts and mists, as Cu | 1 mg/m³ TWA dusts and mists
Zinc Sulfate | Not Listed | Not Listed
Sodium molybdate, Na2MoO4+2H2O | 0.5 mg/m³ TWA respirable fraction, as Mo | 15 mg/m³ TWA total dust
 | 10 mg/m³ TWA inhalable fraction | 5 mg/m³ TWA as Mo
 | 3 mg/m³ TWA respirable fraction | 
Bi-Sodium-EDTA | Not Listed | Not Listed

Engineering controls: Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard

Personal Protective Equipment

Eye/face protection: Eye/face protection is not required, but is recommended in manufacturing situations where contact may occur.
Skin and body protection: Wear suitable protective clothing if contact is anticipated during manufacturing. Immervious gloves.
Respiratory protection: If airborne levels are high or product does not remain intact, use a combination of engineering controls (e.g. ventilation) and personal protection (e.g. NIOSH/MSHA approved respirator for dusts, mists, and fumes)

General hygiene considerations: Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid
Color: Blue
Bulk density: 45-50 lbs/cu.ft.
Flash point: Not applicable
Appearance: Granular
pH: 3.0 - 4.0
Solubility: Water solubility, Highly soluble (>80%)
10. STABILITY AND REACTIVITY

Chemically Stable: Yes
Conditions to avoid: Damp or wet conditions. Extreme heat.
Hazardous decomposition products: Toxic fumes and gases may be generated. Metal oxides possible.
Possibility of hazardous reactions: Poses little or no immediate hazard.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Eye effects: Contact with eyes may cause irritation
Skin effects: May cause skin irritation and/or dermatitis

Chronic toxicity

Carcinogenic effects: The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Components</th>
<th>NTP:</th>
<th>IARC:</th>
<th>OSHA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium sulphate, (NH4)2SO4</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Potassium Phosphate</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Potassium chloride, KCl</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Urea</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Boric acid, H3BO3</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Manganese EDTA</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Iron EDTA</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Copper sulphate, CuSO4</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Zinc Sulfate</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Sodium molybdate, Na2MoO4+2H2O</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>di-Sodium-EDTA</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

General Information

Ingestion: Health injuries are not known or expected under normal use
Inhalation: Health injuries are not known or expected under normal use

12. ECOLOGICAL INFORMATION

Ecotoxicity effects: No data is available on the product itself.
Bioaccumulative potential: Does not bioaccumulate.
Mobility: Water contaminating.
Aquatic toxicity: May be beneficial to plant life.
Additional ecological information: Do not apply directly to lakes, streams, or ponds.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Apply as fertilizer to field. Dispose of in accordance with local regulations and national regulations.
Contaminated packaging: Do not re-use empty containers. If empty, place in trash or offer for recycling if available.

14. TRANSPORT INFORMATION

The description shown may not apply to all situations. Consult 49 CFR, or appropriate dangerous goods regulations for additional description requirements (e.g. technical name) and mode-specific or quantity-specific shipping requirements.

DOT
Proper shipping name: Not regulated

15. REGULATORY INFORMATION
Components | CAS-No | CERCLA/SARA 313 | CERCLA/SARA 302
--- | --- | --- | ---
Ammonium sulphate, (NH₄)₂SO₄ | 7783-20-2 | Not Listed | Not Listed
Potassium Phosphate | 7778-77-0 | Not Listed | Not Listed
Potassium chloride, KCl | 7447-40-7 | Not Listed | Not Listed
Urea | 57-13-6 | Not Listed | Not Listed
Boric acid, H₃BO₃ | 10043-35-3 | Not Listed | Not Listed
Manganese EDTA | 15375-84-5 | Not Listed | Not Listed
Iron EDTA | 15708-41-5 | Not Listed | Not Listed
Copper sulphate, CuSO₄ | 7758-98-7 | 10 lb final RQ | Not Listed
| | 2270 kg final RQ | Not Listed
| | 4.54 kg final RQ | Not Listed
| | 5000 lb final RQ | Not Listed
Zinc Sulfate | 7733-02-0 | 1000 lb final RQ | Not Listed
| | 454 kg final RQ | Not Listed
| | 454 kg final RQ | Not Listed
Sodium molybdate, Na₂MoO₄+2H₂O | 7631-95-0 | Not Listed | Not Listed
di-Sodium-EDTA | 139-33-3 | Not Listed | Not Listed

General Information
Contact local authorities for disposal of large quantities of product

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA:</th>
<th>Health: 1</th>
<th>Flammability: 0</th>
<th>Reactivity: 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS:</td>
<td>Health: 1</td>
<td>Flammability: 0</td>
<td>Reactivity: 0</td>
</tr>
</tbody>
</table>

Hazard Rating: 0=Least; 1=Slight; 2=Moderate; 3=High; 4=Severe

General comment: This document contains health, safety, and environmental information useful to emergency response agencies, health care providers, manufacturers, and workers/employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label.

Revision date: 08-Jun-2005

Additional Information: This information contained herein is, to the best of Scott's knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and Scotts shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, Scotts shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.