MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Miracle-Gro® Ready To Use LiquaFeed™ All Purpose Plant Food, 12-4-8
Description: Liquid Fertilizer

Company
The Scotts Company
14111 Scottslawn Road
Marysville, OH 43041

Formula No.: S11412

2. HAZARDS IDENTIFICATION

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

Labelling
Signal word: No signal word.
Precautionary Statement: Keep out of reach of children.

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

Aggravated Medical Conditions: Inhalation may aggravate asthma.

Principle routes of exposure: Skin, Inhalation, Eyes

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea</td>
<td>57-13-6</td>
<td>15-40</td>
</tr>
<tr>
<td>Potassium Phosphate</td>
<td>7778-77-0</td>
<td>7-13</td>
</tr>
<tr>
<td>Potassium chloride, KCl</td>
<td>7447-40-7</td>
<td>3-7</td>
</tr>
<tr>
<td>Manganese EDTA</td>
<td>15375-84-5</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Zinc-EDTA</td>
<td>14025-21-9</td>
<td>&lt;0.01</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 be 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.

5. FIRE-FIGHTING MEASURES

Flammable properties: Non-flammable.
Suitable extinguishing media: Water spray, carbon dioxide, dry chemical, chemical foam
Explosion potential: Closed containers may rupture violently under fire conditions.
Hazardous combustion products: Toxic fumes may be produced.
Fire fighting procedures: Flood with water to cool containers. Select appropriate method to surround and extinguish fire. Contain run-off as ingredients may be toxic to aquatic organisms.
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: Control spill with dykes and absorb with inert absorbant material.
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

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH:</th>
<th>OSHA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium chloride, KCl</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Urea</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Potassium Phosphate</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Manganese EDTA</td>
<td>0.2 mg/m³ TWA</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Zinc-EDTA</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

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. Imervious 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

<table>
<thead>
<tr>
<th>Physical State: Liquid</th>
<th>Appearance: Clear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color: Green</td>
<td>Odor: None</td>
</tr>
<tr>
<td>pH: 6.7 - 7.1</td>
<td>Bulk density: 1.0 g/cc</td>
</tr>
<tr>
<td>Solubility: Water solubility, Completely soluble</td>
<td>Flash point: Not applicable</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Chemically Stable: Yes
Conditions to avoid: Extreme heat.
Materials to avoid: Strong oxidizing agents (permanganate, dichromate, chlorine, etc.). Reducing agents (sodium nitrite, etc.). Chlorine compounds (sodium hypochlorite, sodium chlorate, pool chemicals, household bleach and other cleaning products). Fuels. Active metals such as aluminum and magnesium.
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: May cause minor irritation
Skin effects: Irritation not expected

Revision date: 13-Jun-2005
**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>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>
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<td>Not listed</td>
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</tbody>
</table>

**General Information**

Very low toxicity for humans and animals

**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.

**Persistence and degradability:**

Inherently biodegradable. Non-persistent.

**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:**

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

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No</th>
<th>CERCLA/SARA 313</th>
<th>CERCLA/SARA 302</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium chloride, KCl</td>
<td>7447-40-7</td>
<td>Not Listed</td>
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<td>14025-21-9</td>
<td>1000 lb final RQ</td>
<td>454 kg final RQ</td>
</tr>
</tbody>
</table>

**General Information**

Contact local authorities for disposal of large quantities of product

### 16. OTHER INFORMATION

**NFPA:**

Health: 1  Flammability: 0  Reactivity: 0

**HMIS:**

Health: 1  Flammability: 0  Reactivity: 0

**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: 13-Jun-2005

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