1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Miracle-Gro® Rose Plant Food 18-24-16
PRODUCT DESCRIPTION: Water Soluble Fertilizer

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Phosphate</td>
<td>7778-77-0</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Ammonium Sulfate</td>
<td>7783-20-2</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Urea</td>
<td>57-13-6</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Copper Sulfate</td>
<td>7758-98-7</td>
<td>None</td>
<td>1 mg (Cu)/m3</td>
</tr>
<tr>
<td>Iron EDTA</td>
<td>15708-41-5</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Manganese EDTA</td>
<td>15375-84-5</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Zinc Sulfate</td>
<td>7733-02-0</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Nuisance Dust</td>
<td></td>
<td>15 mg/m3</td>
<td>3 mg/m3</td>
</tr>
</tbody>
</table>

COMMENTS: The ACGIH Threshold Limit Values (TLV) for nuisance (inert) dusts containing < 1% crystalline silica and no asbestos are: 10 mg/m3 inhalable particulates and 3 mg/m3 respirable particulate. The OSHA TLV is 15 mg/m3 total dust, 5 mg/m3 respirable fraction. Material exposure limits are for airborne 8-hour time-weighted averages and apply only to occupational exposures.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
IMMEDIATE CONCERNS: May cause eye irritation. Keep away from children and pets.

POTENTIAL HEALTH EFFECTS
EYES: May cause slight, temporary irritation.
SKIN: Not known to be a skin irritant.
INHALATION: High mist concentrations may cause mild respiratory tract irritation with coughing and nasal discharge.

4. RECOMMENDATIONS

DISPOSAL METHODS

5. FIRST AID MEASURES

EYES: Flush eyes with water for 15 minutes. Seek medical attention.
SKIN: Wash skin with soap and water. Seek medical attention.
INHALATION: Remove to fresh air. If symptoms occur, seek medical attention.
INGESTION: Do not induce vomiting. Call a Poison Control Center or seek medical attention immediately.

6. FIRE FIGHTING MEASURES

7. SPILL RESPONSE

8. HANDLING AND DISPOSAL

9. TRANSPORTATION INFORMATION

10. LEGAL CONSIDERATIONS

11. OTHER INFORMATION

12. REGULATORY INFORMATION

13. SUPPLEMENTARY INFORMATION

MANUFACTURER
The Scotts Company
Earthgro-Hyponex-Miracle Gro
Scotts-Scotts Sierra-Swiss Farms
14111 Scottslawn Road
Marysville, OH 43041
PN: S9960

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (U.S.): (800) 424-9300
International: 1-703-527-3887
Emergency Phone: 1-937-644-0011
4. FIRST AID MEASURES

**EYES:** 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. Call a poison control center or doctor for treatment advice.

**SKIN:** 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.

**INGESTION:** 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 by the 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 mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**COMMENTS:** See product label for specific First Aid Measures. The above measures are the most conservative and would apply in the event a product label is not immediately available.

5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** Non-Combustible

**EXTINGUISHING MEDIA:** Water spray, carbon dioxide, fine earth, dry chemical, or sand. Use extinguishing media appropriate for the surrounding fire.

**EXPLOSION HAZARDS:** Keep away from heat, sparks, or flames. Flood with water to cool containers.

**FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide, nitrogen oxides (NO₂, NOₓ), potassium and potassium containing compounds, chlorine and chlorine containing compounds (e.g. HCl gas, phosgene), ammonia, cyanuric acid, cyanic acid, and phosphorus and phosphorus containing compounds (e.g. phosphone).

6. ACCIDENTAL RELEASE MEASURES

**GENERAL PROCEDURES:** Sweep up spills. Use good housekeeping practices. Avoid breathing dust. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove to approved landfill.

7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Rinse all equipment after use. Collect all rinse water and apply to appropriate lawn/garden areas.

**HANDLING:** See label. Wash hands with soap and water after handling product. Avoid container breakage. Avoid contact with skin, eyes, or clothing. Keep out of lakes, streams, or ponds. KEEP OUT OF REACH OF CHILDREN.

**STORAGE:** Store in cool, dry area in closed container or package. Keep containers closed at all times. Do not reuse containers. Store away from incompatible materials. Use with proper personal protective equipment. KEEP OUT OF REACH OF CHILDREN.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** If industrial hygiene surveys show that exposures exceed TLV's or other exposure limits, use a combination of local exhaust and general dilution/ventilation to control exposures.

**PERSONAL PROTECTIVE EQUIPMENT**

**EYES AND FACE:** See label. Protective eye wear is typically not required for normal product use. Recommend employees wear chemical safety splash goggles in manufacturing situations where direct contact with the product may result.

**SKIN:** See label. No special skin protection is necessary under normal use conditions. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing protective clothing. Wash thoroughly with soap and water after handling.

**RESPIRATORY:** When work conditions are such that aerosols or mists may be generated or present, use a suitable
NIOSH/MSHA approved respirator. Under normal conditions with adequate ventilation, no protection is necessary.

**OTHER USE PRECAUTIONS:** In manufacturing operations, eyewash and deluge shower recommended.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Granular  
**ODOR:** Slight ammonia odor.  
**APPEARANCE:** Fine granules.  
**COLOR:** Light pink.  
**MELTING POINT:** 271°F - 631°F (133°C - 333°C)  
**SOLUBILITY IN WATER:** 28 gms./100mls. water  
**SPECIFIC GRAVITY:** 0.80

### 10. STABILITY AND REACTIVITY

**STABLE:** YES  
**HAZARDOUS POLYMERIZATION:** NO  
**CONDITIONS TO AVOID:** Excessive heat, contact with strong alkalis, fuels, other combustible materials, strong oxidizing agents (permanganate, dichromate, chlorine, etc.), strong acids (e.g. sulfuric acid), strong bases (e.g. sodium hydroxide) reducing agents, methanamine, and many chlorine compounds (e.g. sodium hypochlorite, sodium chlorate, pool chemicals, household bleach and other cleaning products). Active metals such as aluminum and magnesium.  
**STABILITY:** Stable  
**POLYMERIZATION:** Will not occur

### 11. TOXICOLOGICAL INFORMATION

**CARCINOGENICITY:**  
**IARC:** No  
**NTP:** No  
**OSHA:** No  

**COMMENTS:** There are limited data regarding this product. Exposure to this product can occur by eye and skin contact, ingestion, or inhalation of dusts. Eye contact may cause slight, temporary irritation. Skin contact may cause mild irritation. Ingestion may cause nausea, vomiting along with mild irritation to the mouth, throat, esophagus and stomach. High dust concentrations may cause mild respiratory tract irritation with coughing and nasal discharge.

### 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** Prevent large quantities from contacting vegetation or waterways. Keep animals away from large spills. This material is highly beneficial to plant life. There are no known adverse effects on aquatic life.

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose in normal waste disposal. Do not reuse empty container. See label for specific product disposal recommendations.

### 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**  
**PROPER SHIPPING NAME:** Not DOT regulated.
OTHER SHIPPING INFORMATION: The transportation information shown may not apply to all shipping situations. Consult 49 CFR, or appropriate Dangerous Goods Regulations for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping regulations.

15. REGULATORY INFORMATION

GENERAL COMMENTS: Contact local authorities for proper disposal of large quantities of unused product.

16. OTHER INFORMATION

REVISION SUMMARY New MSDS

NFPA CODES

HEALTH: 1  FIRE: 0  REACTIVITY: 0

MANUFACTURER DISCLAIMER: The information contained herein is, to the best of the Manufacturer's (see Section 1) 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 the Manufacturer 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, the Manufacturer 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.

ADDITIONAL MSDS INFORMATION: NFPA Hazard Rating: 0=Least; 1=Slight; 2=Moderate; 3=High; 4=Severe.

GENERAL STATEMENTS: 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.