



MATERIAL SAFETY DATA SHEET

Date stamp: 14-Jun-2007

MSDS Ref. No.: 101320

Revision Number: 0

1. PRODUCT AND COMPANY IDENTIFICATION

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

Company
The Scotts Company LLC
14111 Scottslawn Road
Marysville, OH 43041

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

Formula No.: S10385
Product Number(s): 101320

2. HAZARDS IDENTIFICATION

Labelling

Signal word: No signal word
Precautionary Statements: 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.
Principle routes of exposure: Skin, Inhalation

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No | Weight % |
|---|------------|----------|
| Urea | 57-13-6 | 30-60 |
| Potassium Phosphate | 7778-77-0 | 10-30 |
| Ammoniumsulphate, (NH ₄) ₂ SO ₄ | 7783-20-2 | 10-30 |
| Potassium chloride, KCl | 7447-40-7 | 10-30 |
| Iron EDTA | 15708-41-5 | 1.0-5.0 |
| Manganese EDTA | 15375-84-5 | 0.1-1.0 |
| Copper sulphate, CuSO ₄ | 7758-98-7 | 0.1-1.0 |
| Zinc Sulfate Anhydrous | 7733-02-0 | 0.1-1.0 |
| Boric acid, H ₃ BO ₃ | 10043-35-3 | 0.1-1.0 |
| Sodium molybdate, Na ₂ MoO ₄ +2H ₂ O | 7631-95-0 | <0.1 |

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

5. FIRE-FIGHTING MEASURES

Flammable properties: Decomposes on heating.

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5. FIRE-FIGHTING MEASURES

| | |
|---|---|
| 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, (NH ₄) ₂ SO ₄ | Not Listed | Not Listed |
| Potassium Phosphate | Not Listed | Not Listed |
| Potassium chloride, KCl | Not Listed | Not Listed |
| Urea | Not Listed | Not Listed |
| Boric acid, H ₃ BO ₃ | 2 mg/m ³ TWA | Not Listed |
| Manganese EDTA | Not Listed | Not Listed |
| Iron EDTA | 1 mg/m ³ TWA | Not Listed |
| Copper sulphate, CuSO ₄ | Not Listed | Not Listed |
| Sodium molybdate, Na ₂ MoO ₄ +2H ₂ O | 0.5 mg/m ³ TWA | 5 mg/m ³ TWA |
| Zinc Sulfate Anhydrous | 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

Eyeface 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. Impervious 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 | Appearance: | Granular |
| Color: | Blue | pH: | 3.0 - 4.0 |
| Bulk density: | 45-50 lbs/cu.ft. | Solubility: | Water solubility, Highly soluble (>80%) |
| Flash point: | Not applicable | | |

10. STABILITY AND REACTIVITY

| | |
|--|--|
| Chemically Stable: | Yes |
| Conditions to avoid: | Damp or wet conditions. Extreme heat. |
| Materials to avoid: | Oxidizing agents. Metals. Bases. |
| Hazardous decomposition products: | Toxic fumes and gases may be generated. Metal oxides possible. |

10. STABILITY AND REACTIVITY

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.

| Components | NTP: | IARC: | OSHA: |
|---|------------|------------|------------|
| Ammoniumsulphate, (NH ₄) ₂ SO ₄ | Not listed | Not listed | Not listed |
| Potassium Phosphate | Not listed | Not listed | Not listed |
| Potassium chloride, KCl | Not listed | Not listed | Not listed |
| Urea | Not listed | Not listed | Not listed |
| Boric acid, H ₃ BO ₃ | Not listed | Not listed | Not listed |
| Manganese EDTA | Not listed | Not listed | Not listed |
| Iron EDTA | Not listed | Not listed | Not listed |
| Copper sulphate, CuSO ₄ | Not listed | Not listed | Not listed |
| Sodium molybdate, Na ₂ MoO ₄ ·2H ₂ O | Not listed | Not listed | Not listed |
| Zinc Sulfate Anhydrous | Not listed | Not listed | Not listed |

General Information

Ingestion: Very low toxicity for humans and animals
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: 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 DOT regulated

15. REGULATORY INFORMATION

15. REGULATORY INFORMATION

| Components | CAS-No | CERCLA/SARA 313 | CERCLA/SARA 302 |
|---|------------|-------------------------------------|-----------------|
| Ammoniumsulphate, (NH ₄) ₂ SO ₄ | 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, H ₃ BO ₃ | 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, CuSO ₄ | 7758-98-7 | 10 lb final RQ 4.54 kg final RQ | Not Listed |
| Sodium molybdate, Na ₂ MoO ₄ ·2H ₂ O | 7631-95-0 | Not Listed | Not Listed |
| Zinc Sulfate Anhydrous | 7733-02-0 | 1000 lb final RQ 454 kg final RQ | Not Listed |

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.

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.