



MATERIAL SAFETY DATA SHEET

Date stamp: 29-Jul-2005

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Revision Number: 4

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

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.: 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

Components	CAS-No	Weight %
Urea	57-13-6	15-40
Potassium Phosphate	7778-77-0	7-13
Potassium chloride, KCl	7447-40-7	3-7
Manganese EDTA	15375-84-5	<0.01
Zinc-EDTA	14025-21-9	<0.01

4. FIRST AID MEASURES

Eye contact: Hold eye open and rins 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: 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

Components	ACGIH:	OSHA:
Potassium chloride, KCl	Not Listed	Not Listed
Urea	Not Listed	Not Listed
Potassium Phosphate	Not Listed	Not Listed
Manganese EDTA	0.2 mg/m ³ TWA	Not Listed
Zinc-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. 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

Physical State: Liquid	Appearance: Clear
Color: Green	Odor: None
pH: 6.7 - 7.1	Bulk density: 1.0 g/cc
Solubility: Water solubility, Completely soluble	Flash point: Not applicable

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

Chronic toxicity

Carcinogenic effects:

The table below indicates whether each agency has listed any indredient as a carcinogen.

Components	NTP:	IARC:	OSHA:
Potassium chloride, KCl	Not listed	Not listed	Not listed
Urea	Not listed	Not listed	Not listed
Potassium Phosphate	Not listed	Not listed	Not listed
Manganese EDTA	Not listed	Not listed	Not listed
Zinc-EDTA	Not listed	Not listed	Not listed

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

Components	CAS-No	CERCLA/SARA 313	CERCLA/SARA 302
Potassium chloride, KCl	7447-40-7	Not Listed	Not Listed
Urea	57-13-6	Not Listed	Not Listed
Potassium Phosphate	7778-77-0	Not Listed	Not Listed
Manganese EDTA	15375-84-5	Not Listed	Not Listed
Zinc-EDTA	14025-21-9	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.

Revision date: 13-Jun-2005

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