



MATERIAL SAFETY DATA SHEET

Date stamp: 29-Jul-2005

MSDS Ref. No.: 100899

Revision Number: 11

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Miracle-Gro® Shake'N Feed® Continuous Release Palm Plant Food, 8-8-8
Description: Water Soluble 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.: S11213

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No	Weight %
Sulphur, S	7704-34-9	-
Potassium chloride, KCl	7447-40-7	-
Ammonium Phosphate	7722-76-1	-
Iron sulphate, FeSO4·7H2O	7782-63-0	0.7
Iron Oxide	1309-37-1	0.7
Magnesiumsulphate, MgSO4	7487-88-9	1.5
Magnesiumoxide, MgO	1309-48-4	0.7
Copper Oxide	1317-38-0	0.86
Manganese sulphate, MnSO4	7785-87-7	0.86
Manganese Oxide	1344-43-0	0.86
Copper sulphate, CuSO4	7758-98-7	0.086
Zinc Sulfate	7733-02-0	0.17
Ammoniumsulphate, (NH4)2SO4	7783-20-2	-

Comments: Product consists of a mixture in which the concentration of some propriatery components are not indicated or are unknown.

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 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: 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:
Copper sulphate, CuSO4	0.2 mg/m ³ TWA fume 1 mg/m ³ TWA dusts and mists, as Cu	0.1 mg/m ³ TWA fume 1 mg/m ³ TWA dusts and mists
Zinc Sulfate	Not Listed	Not Listed
Manganese Oxide	0.2 mg/m ³ TWA 0.2 mg/m ³ TWA as Mn	Not Listed
Manganese sulphate, MnSO4	0.2 mg/m ³ TWA 0.2 mg/m ³ TWA as Mn	Not Listed
Copper Oxide	0.2 mg/m ³ TWA fume 1 mg/m ³ TWA dusts and mists, as Cu	0.1 mg/m ³ TWA fume 1 mg/m ³ TWA dusts and mists
Magnesiumoxide, MgO	10 mg/m ³ TWA inhalable fraction	15 mg/m ³ TWA total particulate
Magnesiumsulphate, MgSO4	Not Listed	Not Listed
Iron Oxide	1 mg/m ³ TWA as Fe 5 mg/m ³ TWA dust and fume, as Fe	10 mg/m ³ TWA
Iron sulphate, FeSO4+7H2O	1 mg/m ³ TWA as Fe	Not Listed
Ammonium Phosphate	Not Listed	Not Listed
Ammoniumsulphate, (NH4)2SO4	Not Listed	Not Listed
Potassium chloride, KCl	Not Listed	Not Listed
Sulphur, S	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. 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:	Green, Brown	Odor:	Fertilizer
Bulk density:	60-65 lbs/cu.ft.	Solubility:	No information available
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.
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:
Copper sulphate, CuSO4	Not listed	Not listed	Not listed
Zinc Sulfate	Not listed	Not listed	Not listed
Manganese Oxide	Not listed	Not listed	Not listed
Manganese sulphate, MnSO4	Not listed	Not listed	Not listed
Copper Oxide	Not listed	Not listed	Not listed
Magnesiumoxide, MgO	Not listed	Not listed	Not listed
Magnesiumsulphate, MgSO4	Not listed	Not listed	Not listed
Iron Oxide	Not listed	3	Not listed
Iron sulphate, FeSO4+7H2O	Not listed	Not listed	Not listed
Ammonium Phosphate	Not listed	Not listed	Not listed
Ammoniumsulphate, (NH4)2SO4	Not listed	Not listed	Not listed
Potassium chloride, KCl	Not listed	Not listed	Not listed
Sulphur, S	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 regulated

15. REGULATORY INFORMATION

Components	CAS-No	CERCLA/SARA 313	CERCLA/SARA 302
Copper sulphate, CuSO4	7758-98-7	10 lb final RQ 2270 kg final RQ 4.54 kg final RQ 5000 lb final RQ	Not Listed
Zinc Sulfate	7733-02-0	1000 lb final RQ 454 kg final RQ 454 kg final RQ	Not Listed
Manganese Oxide	1344-43-0	Not Listed	Not Listed
Manganese sulphate, MnSO4	7785-87-7	Not Listed	Not Listed
Copper Oxide	1317-38-0	2270 kg final RQ 5000 lb final RQ	Not Listed
Magnesiumoxide, MgO	1309-48-4	Not Listed	Not Listed
Magnesiumsulphate, MgSO4	7487-88-9	Not Listed	Not Listed
Iron Oxide	1309-37-1	Not Listed	Not Listed
Iron sulphate, FeSO4+7H2O	7782-63-0	1000 lb final RQ 454 kg final RQ	Not Listed
Ammonium Phosphate	7722-76-1	Not Listed	Not Listed
Ammoniumsulphate, (NH4)2SO4	7783-20-2	Not Listed	Not Listed
Potassium chloride, KCl	7447-40-7	Not Listed	Not Listed
Sulphur, S	7704-34-9	Not Listed	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.

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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.