



# Material Safety Data Sheet

United States

Miracle-Gro Lawn Products Inc.  
14111 Scottslawn Road  
Marysville, Ohio 43041  
United States

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

## MIRACLE-GRO WATER SOLUBLE ALL PURPOSE PLANT FOOD 24-8-16

### 1. Product and company identification

SKU # : 1000282, 1000992, 1001122, 1001192, 1001232, 1007502, 2001122,  
2001232, 201625, 226001, 3001192, 500029, 5000292, 5001122  
MSDS # : 320000000133

### 2. Hazards identification

Physical state : Solid [CRYSTALLINE POWDER.]

Odor : Fertilizer

OSHA/HCS status : This material is/or contains a chemical that is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview : No harmful effects expected.

**Potential chronic health effects**

Chronic effects : Contains material that can cause target organ damage.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Target organs : Contains material which causes damage to the following organs:  
gastrointestinal tract  
skin  
eyes

**Over-exposure signs/symptoms**

Inhalation : No specific data.

Ingestion : No specific data.

Skin : No specific data.

Eyes : No specific data.

Medical conditions aggravated by over-exposure : Pre-existing skin disorders may be aggravated by over-exposure to this product.

Interactions with other Chemicals : Not available.

See toxicological information (section 11)

### 3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Urea	57-13-6	40 - 70
Potassium chloride (KCl)	7447-40-7	15 - 30
Ferrate(1-), [[N,N'-1,2-ethanediy]bis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)-, sodium (1:1), (OC-6-21)-	15708-41-5	1 - 3

### 4. First aid measures

<b>Eye contact</b>	:	Hold eye open and rinse slowly and gently with water for 15 to 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.
<b>Skin contact</b>	:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
<b>Inhalation</b>	:	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.
<b>Ingestion</b>	:	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. Never give anything by mouth to an unconscious person.
<b>Protection of first-aiders</b>	:	No action shall be taken involving any personal risk or without suitable training.

### 5. Fire-fighting measures

<b>Flammability of the product</b>	:	No specific fire or explosion hazard.
<b><u>Extinguishing media</u></b>		
<b>Suitable</b>	:	Use an extinguishing agent suitable for the surrounding fire.
<b>Not suitable</b>	:	None known.
<b>Special exposure hazards</b>	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
<b>Hazardous thermal decomposition products</b>	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
<b>Special protective equipment for fire-fighters</b>	:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### 6. Accidental release measures

<b>Personal precautions</b>	:	Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).
<b>Environmental precautions</b>	:	No specific hazard.
<b>Methods for cleaning up</b>	:	Vacuum or sweep up material and place in container for disposal. Never place down drain.

## 7. Handling and storage

- Handling** : Avoid inhalation or contact with skin, eyes or clothing. Avoid container breakage. Do not contaminate water sources when disposing of equipment washwater or rinsate. Keep out of lakes, stream or ponds. Keep out of reach of children.
- Storage** : Store in original container in a cool, dry, well-ventilated area inaccessible to children and pets. Do not contaminate food or feedstuffs.

## 8. Exposure controls/personal protection

### Product name

Urea

### Exposure limits

**AIHA WEEL (1999-01-01)** Time Weighted Average (TWA)  
10 mg/m<sup>3</sup>

Ferrate(1-), [[N,N'-1,2-ethanediy]bis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, sodium (1:1), (OC-6-21)-

**NIOSH REL (1994-06-01)** Time Weighted Average (TWA) 1 mg/m<sup>3</sup>

**OSHA PEL 1989 (1989-03-01)** PEL: Permissible Exposure Level 1 mg/m<sup>3</sup> Form: Soluble

**ACGIH TLV (1994-09-01)** TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 1 mg/m<sup>3</sup>

### **Consult local authorities for acceptable exposure limits.**

**Engineering measures** : Use adequate ventilation to keep the airborne concentrations below the recommended exposure standard.

**Hygiene measures** : Wash thoroughly with soap and water after handling. Remove and launder contaminated clothing before reuse.

### Personal protection

**Respiratory** : No special respiratory protection required. If ventilation is inadequate to keep the airborne concentrations below the recommended exposure standard wear appropriate respiration protection.

**Hands** : Protective gloves are not required, but may be used in situations where significant contact is expected.

**Eyes** : Protective eyewear is not required, but may be used in situations where contact is expected.

**Skin** : No special protective clothing is required.

## 9. Physical and chemical properties

**Physical state** : Solid [CRYSTALLINE POWDER.]

**Color** : Color-PantoneBlue.

**Flash point** : Not available.

**Auto-ignition temperature** : Not available.

**Odor** : Fertilizer

**Odor threshold** : Not available.

**pH** : Not available.

**Boiling/condensation point** : Not available.

**Melting/freezing point** : Not available.

**Critical temperature** : Not available.

**Density** : Not available.

**Vapor pressure** : Not available.

**Vapor density** : Not available.

**Evaporation rate** : Not available.

**Viscosity** : Not available.

**Solubility** : Not available.

**Partition Coefficient (n-octanol)** : Not available.

Decomposition temperature : Not available.

## 10. Stability and reactivity

**Chemical stability** : The product is stable.  
**Conditions to avoid** : No specific data.  
**Materials to avoid** : No specific data.  
**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

## 11. Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Urea	LD50 Oral	Rat	8,471 mg/kg	-
Potassium chloride (KCl)	LD50 Oral	Rat	2,600 mg/kg	-
Ferrate(1-), [[N,N'-1,2-ethanediy]bis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)-, sodium (1:1), (OC-6-21)-	LD50 Oral	Rat	> 5,000 mg/kg	-
Ferrate(1-), [[N,N'-1,2-ethanediy]bis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)-, sodium (1:1), (OC-6-21)-	LD50 Dermal	Rat	> 5,000 mg/kg	-

Conclusion/Summary : No known significant effects or critical hazards.

### Irritation/Corrosion

Skin : Non-irritating  
Eyes : May cause eye irritation.  
Respiratory : May cause respiratory irritation

### Sensitizer

Conclusion/Summary : Skin : Not sensitizing - based on the individual components  
Respiratory : Not sensitizing - based on the individual components

### Chronic toxicity

Conclusion/Summary : No known significant effects or critical hazards.

### Carcinogenicity

Conclusion/Summary : No known significant effects or critical hazards.

### Mutagenicity

Conclusion/Summary : No known significant effects or critical hazards.

### Teratogenicity

Conclusion/Summary : No known significant effects or critical hazards.

### Reproductive toxicity

Conclusion/Summary : No known significant effects or critical hazards.

## 12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

**Aquatic ecotoxicity**

Conclusion/Summary No known significant effects or critical hazards.

**Persistence/degradability**

Conclusion/Summary No known significant effects or critical hazards.

**13. Disposal considerations**

Waste disposal Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. Transport information**

**Regulatory**

<u>information</u>	<u>UN no.</u>	<u>Proper shipping name</u>	<u>Class</u>	<u>PG*</u>	<u>Note</u>
DOT		Not Regulated			

PG\* : Packing group

**15. Regulatory information**

**United States** :

**U.S. Federal regulations**

**California Prop. 65** : Not listed.

**United States inventory (TSCA 8b)** : All components are listed or exempted.

**Canada inventory** : All components are listed or exempted.

**16. Other information**

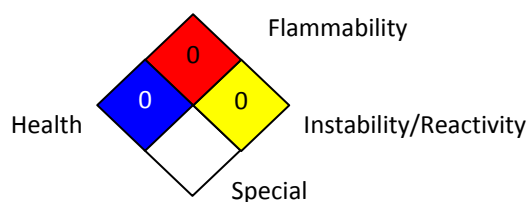
**Hazardous Material Information System (U.S.A.) :**

<b>Health</b>	1
<b>Flammability</b>	0
<b>Physical hazards</b>	0

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The customer is responsible for determining the PPE code for this material.

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