



# Material Safety Data Sheet

According to EC Regulation 1907/2006

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## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### Identification of the substance or preparation

MSDS Ref. No.: SCSDS359  
 Product name: Miracle-Gro Controlled Release Plant Food  
 Synonyms: Miracle-Gro Controlled Release Shaker Pack  
 Osmocote Controlled Release Plant Food

### Use of the Substance/Preparation

**Recommended use:** For use only as a home garden fertilizer.

**Company/Undertaking Identification** • The Scotts Company (UK) Ltd, Salisbury House, Weyside Park, Catteshall Lane, Godalming, Surrey, GU7 1XE, United Kingdom

**Emergency telephone number:** • ++44 (0) 1865 407333 (24h)

**Email** INFO-MSDS@Scotts.com

## 2. HAZARDS IDENTIFICATION

### Classification

The product is non-dangerous in accordance with Directive 1999/45/EC

### Most important hazards

None

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical nature of the preparation

Components	CAS-No	Weight %	EC-No.	Classification
Magnesium oxide, MgO	1309-48-4	0.1 - 1.5%	215-171-9	NE
Potassium nitrate, KNO <sub>3</sub>	7757-79-1	10 - 20%	231-818-8	O;R08
Ammonium nitrate, NH <sub>4</sub> NO <sub>3</sub>	6484-52-2	20 - 30%	229-347-8	O;R08

NE = Non-Established

***For the full text of the R phrases mentioned in this Section, see Section 16***

#### 4. FIRST AID MEASURES

<b>General advice:</b>	If you feel unwell, seek medical advice (show the label where possible).
<b>Ingestion:</b>	Rinse mouth. Drink 1 or 2 glasses of water. If symptoms persist, call a physician.
<b>Inhalation:</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Skin contact:</b>	Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.
<b>Eye contact:</b>	Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.

#### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**Use dry chemical, CO<sub>2</sub>, water spray or "alcohol" foam.**Unsuitable extinguishing media:**

High volume water jet

**Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases:**

Thermal decomposition can lead to release of irritating gases and vapours

**Special protective equipment for firefighters:**

Use personal protective equipment. Self-contained breathing apparatus and suitable protective clothing.

**Specific methods:**

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation.

**Environmental precautions:**

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

**Methods for cleaning up:**

Sweep up and shovel into suitable containers for disposal.

#### 7. HANDLING AND STORAGE

**Handling:****Technical measures/precautions:**

Avoid dust formation.

<b>Safe handling advice:</b>	Keep away from flammable material. Avoid dust formation. When using do not eat or drink. When using do not smoke.
<b>Storage:</b>	
<b>Technical measures/storage conditions:</b>	Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep out of reach of children. Keep away from food, drink and animal feeding stuffs.
<b>Incompatible products:</b>	Oxidising and spontaneously flammable products
<b>Specific use(s):</b>	Granulated fertilizer.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures to reduce exposure:** Ensure adequate ventilation.

### Occupational exposure controls

#### Personal protective equipment

<b>Respiratory protection:</b>	Effective dust mask.
<b>Hand protection:</b>	PVC or other plastic material gloves.
<b>Eye/face protection</b>	Safety glasses with side-shields.
<b>Skin and body protection:</b>	Lightweight protective clothing.
<b>Hygiene measures</b>	When using, do not eat, drink or smoke. Wash hands before stopping and immediately after handling.

### Exposure limit values

#### *Magnesium oxide, MgO*

Austria - MAKs	6 mg/m <sup>3</sup>
Belgium - 8 Hr VLE	10 mg/m <sup>3</sup>
Czech Republic OEL	5 mg/m <sup>3</sup> TWA
France - Valeurs Limites d'exposition (VLE)	10 mg/m <sup>3</sup>
France INRS (VME)	10 mg/m <sup>3</sup> VME
Germany (DFG) - MAK	6 mg/m <sup>3</sup>
Netherlands - OEL - MACs:	10 mg/m <sup>3</sup>
Norway - 8 h:	10 mg/m <sup>3</sup>
Portugal - TWAs	10 mg/m <sup>3</sup> TWA
Spain - Valores Limite Ambientales - VLE	10 mg/m <sup>3</sup> VLA-ED
UK EH40 WEL:	10 mg/m <sup>3</sup>

#### *Ammonium nitrate, NH<sub>4</sub>NO<sub>3</sub>*

Czech Republic OEL	= 10.0 mg/m <sup>3</sup> TWA
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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General Information

<b>Physical State:</b>	Solid
<b>Color:</b>	Grey, Brown

**Odor:** None

### Important Health Safety and Environmental Information

**Solubility:** Coating not soluble, release nutrients through coating

**Flammability (solid, gas):** Not easily flammable

### Other information

**Bulk density:** 800 - 1100kg/m<sup>3</sup>

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under recommended storage conditions.

**Conditions to avoid:** Keep away from open flames, hot surfaces and sources of ignition.

**Materials to avoid:** Combustible material.

**Hazardous decomposition products:** Thermal decomposition can lead to release of irritating gases and vapours.

## 11. TOXICOLOGICAL INFORMATION

### Component information

*Potassium nitrate, KNO<sub>3</sub>*

**LD<sub>50</sub>/oral/rat =** 3750mg/kg

*Ammonium nitrate, NH<sub>4</sub>NO<sub>3</sub>*

**LD<sub>50</sub>/oral/rat =** 410 mg/kg

### Product information

#### Local effects

**Skin effects:** Non-irritating to the skin.

**Eye effects:** May cause temporary eye irritation as a foreign body in the eye.

**Inhalation:** Not irritating.

**Ingestion:** Not irritating.

## 12. ECOLOGICAL INFORMATION

### Product information

**Aquatic toxicity:** No information available

**Component information***Ammonium nitrate, NH<sub>4</sub>NO<sub>3</sub>***Ecotoxicity effects**EC50/48h/daphnia =100 mg/l  
LC50/96h/rainbow trout =10 mg/l  
EC50/72h/algae = 74000 µg/l**13. DISPOSAL CONSIDERATIONS****Waste Disposal Methods:** Do not contaminate ponds, waterways or ditches with chemical or used container. Unused product and its container may be disposed of in the dustbin..**Contaminated packaging:** Do not re-use empty containers.**14. TRANSPORT INFORMATION****Product information****Physical State:** Solid**ADR/RID****UN-No:** Not classified for transport**IATA****UN-No:** Not classified for transport**IMO / IMDG****UN-No:** Not classified for transport**15. REGULATORY INFORMATION****Indication of danger:**The product is non-dangerous in accordance with Directive 1999/45/EC  
To avoid risks to man and the environment, comply with the instructions for use.**Registration number UK/Eire**

Not applicable

## 16. OTHER INFORMATION

### Text of R Phrases mentioned in Section 3

R 8 - Contact with combustible material may cause fire.

### **Reason for revision:**

\*\*\* Indicates changes since the last revision. This version replaces all previous versions

### **Prepared by:**

Regulatory Affairs Department.

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**End of Safety Data Sheet**