



# SAFETY DATA SHEET

According to EC Directive 2001/58/EC

Print date: 20-Jun-2006

Revision Number: 0

Revision date:

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

### Identification of the substance or preparation

MSDS Ref. No.: 6673.02.04  
Product name: Osmocote Exact Tablet 15+9+9 (5g) 5-6M  
Synonyms: Osmocote Exact tablet 15+4.0+7.5 (5g) 5-6M

### Use of the Substance/Preparation

Recommended use: Granulated fertilizer.

### Company/Undertaking Identification

- Scotts International BV  
Nijverheidsweg 1-5  
6422 PD Heerlen (NL)  
Tel: ++31 (0) 45-5609100  
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Emergency telephone number: • As long as no emergency telephone number is available in Europe, please contact in case of an emergency: ++31 (0) 45 5609100

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical nature of the preparation

Components	CAS-No	Weight %	EC-No.	Classification
Sodium molybdate, Na <sub>2</sub> MoO <sub>4</sub> +2H <sub>2</sub> O	7631-95-0	< 1%	231-298-2	Xi;R36/37/38
Potassium nitrate, KNO <sub>3</sub>	7757-79-1	10 - 25%	231-818-8	O;R08
Manganese sulphate, MnSO <sub>4</sub>	7785-87-7	< 1%	232-08-99	N;R51/53 Xn;R48/20/22
Magnesiumoxide, MgO	1309-48-4	< 1%	215-171-9	NE
Ironsulphate, FeSO <sub>4</sub> +1H <sub>2</sub> O	7720-78-7	< 1%	231-753-5	Xn;R22
Copper sulphate, CuSO <sub>4</sub>	7758-98-7	< 1%	231-847-6	N;R50/53 Xi;R36/38 Xn;R22
Calcium sulphate dihydrate, CaSO <sub>4</sub> +2H <sub>2</sub> O	10101-41-4	1 - 5%	231-900-3	NE
Ammoniumnitrate, NH <sub>4</sub> NO <sub>3</sub>	6484-52-2	> 25%	229-347-8	O;R08

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

Revision date:

Page 1 of 7

### 3. HAZARDS IDENTIFICATION

**Classification**

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

**Most important hazards**

None

### 4. FIRST AID MEASURES

**General advice:**

If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.

**Ingestion:**

Rinse mouth. Do not induce vomiting without medical advice. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person.

**Inhalation:**

Not applicable. Dusty conditions are unlikely if product is used as intended and product-coating remains intact. However, if prolonged inhalation of dust occurs, remove victim to fresh air.

**Skin contact:**

If a person feels unwell or symptoms of skin irritation appear, consult a physician.

**Eye contact:**

If eye irritation persists, consult a specialist.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**

Use dry chemical, CO<sub>2</sub>, water spray or "alcohol" foam.

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

Product smoulders! In case of fire, cool with water or waterspray  
Thermal decomposition can lead to release of irritating gases and vapours

**Special protective equipment for firefighters:**

In the event of fire, wear self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

No conditions to be specially mentioned.

**Environmental precautions:**

Prevent product from entering drains. Do not contaminate surface water.

**Methods for cleaning up:**

Use up product completely. Packaging material is industrial waste.

### 7. HANDLING AND STORAGE

## 7. HANDLING AND STORAGE

**Handling:**

**Technical measures/precautions:** No special technical protective measures required.

**Safe handling advice:** No special precautions required.

**Storage:**

**Technical measures/storage conditions:** For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used bags should be closed well. Keep at temperatures between 0 °C and 40 °C .

**Incompatible products:** No information available

**Specific use(s):** Granulated fertilizer. Tablet out of resin coated prills.

**Packaging material:** Plastic bags, Cardboard box

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

**Occupational exposure controls****Personal protective equipment**

**Respiratory protection:** Not applicable.

**Hand protection:** PVC or other plastic material gloves.

**Eye/face protection:** Not applicable.

**Skin and body protection:** Usual safety precautions while handling the product will provide adequate protection against this potential effect.

**Hygiene measures** Follow good housekeeping practices. When using, do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs.

**Exposure limit values****Environmental exposure controls**

Do not allow material to contaminate ground water system.

*Sodium molybdate, Na<sub>2</sub>MoO<sub>4</sub>·2H<sub>2</sub>O*

Finland - Occupational Exposure Limits - 8 hour 6 mg/m<sup>3</sup>  
France - Valeurs Limites d'exposition (VLE) 5 mg/m<sup>3</sup>

*Manganese sulphate, MnSO<sub>4</sub>*

Belgium - 8 Hr VLE 0.2 mg/m<sup>3</sup>  
Finland - Occupational Exposure Limits - 8 hour 0.5 mg/m<sup>3</sup>  
Netherlands - OEL - MACs: 1 mg/m<sup>3</sup>  
Norway - 8 h: 2.5 mg/m<sup>3</sup>  
UK EH40 WEL: 5 mg/m<sup>3</sup>

*Magnesiumoxide, MgO*

Austria - MAKs 6 mg/m<sup>3</sup>  
Belgium - 8 Hr VLE 10 mg/m<sup>3</sup>  
Czech Republic OEL Listed  
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>

*Ironsulphate, FeSO4+1H2O*

Belgium - 8 Hr VLE	1 mg/m <sup>3</sup>
Finland - Occupational Exposure Limits - 8 hour	1 mg/m <sup>3</sup>
Netherlands - OEL - MACs:	1 mg/m <sup>3</sup>
Norway - 8 h:	0.01 mg/m <sup>3</sup>
UK EH40 WEL:	LTEL (8 hr TWA) 1 mg/m <sup>3</sup> STEL (15 min) 2mg/m <sup>3</sup>

*Copper sulphate, CuSO4*

Finland - Occupational Exposure Limits - 8 hour	1 mg/m <sup>3</sup> TWA
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*Calcium sulphate dihydrate, CaSO4+2H2O*

France INRS (VME)	10 mg/m <sup>3</sup> VME
Netherlands - OEL - MACs:	0.5 mg/m <sup>3</sup> MAC
UK EH40 WEL:	10 mg/m <sup>3</sup> TWA 4 mg/m <sup>3</sup> TWA

*Ammoniumnitrate, NH4NO3*

Czech Republic OEL	Listed
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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**General Information**

<b>Physical State:</b>	Solid
<b>Appearance:</b>	Tablet out of resin coated prills
<b>Color:</b>	Brown, Green
<b>Odor:</b>	No information available

**Important Health Safety and Environmental Information**

<b>Flammability (solid, gas):</b>	Non-flammable
<b>Solubility:</b>	Coating not soluble, release nutrients through coating

**Other information**

<b>Bulk density:</b>	No data available
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## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Conditions to avoid:</b>	No special storage conditions required.
<b>Materials to avoid:</b>	No information available

**Hazardous decomposition products:**

No decomposition if stored normally

**11. TOXICOLOGICAL INFORMATION****Component information***Sodium molybdate, Na<sub>2</sub>MoO<sub>4</sub>·2H<sub>2</sub>O***LD50/oral/rat =** 4000 mg/kg*Potassium nitrate, KNO<sub>3</sub>***LD50/oral/rat =** 3750mg/kg*Manganese sulphate, MnSO<sub>4</sub>***LD50/oral/rat =** 9 g/kg*Ironsulphate, FeSO<sub>4</sub>·1H<sub>2</sub>O***LD50/oral/rat =** 1389 mg/kg*Copper sulphate, CuSO<sub>4</sub>***LD50/oral/rat =** 960 mg/kg*Ammoniumnitrate, NH<sub>4</sub>NO<sub>3</sub>***LD50/oral/rat =** 410 mg/kg**Product information****LD50/oral/rat =** > 10 gr/kg**Local effects****Skin effects:**

May cause skin irritation in susceptible persons

**Eye effects:**

May cause eye irritation with susceptible persons

**Inhalation:**

May cause sensitization by inhalation

**Ingestion:**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

**12. ECOLOGICAL INFORMATION****Product information****Water Endangering Class (WGK):** 1 (Scotts classification )**Component information***Sodium molybdate, Na<sub>2</sub>MoO<sub>4</sub>·2H<sub>2</sub>O***Ecotoxicity effects**

LC50/96h/rainbow trout =&gt; 2800 g/l

*Manganese sulphate, MnSO4***Ecotoxicity effects**

EC50/48h/daphnia =&gt; 100 mg/l

*Ironsulphate, FeSO4+1H2O***Ecotoxicity effects**

EC50/48h/daphnia = &gt;100mg/l

LC50/96h/rainbow trout = &gt;72.5mg/l (6d)

EC50/72h/algae = 22mg/l

*Copper sulphate, CuSO4***Ecotoxicity effects**

EC50/48h/daphnia =0.8 mg/l

*Ammoniumnitrate, NH4NO3***Ecotoxicity effects**

EC50/48h/daphnia =100 µg/l

LC50/96h/rainbow trout =10 µg/l

EC50/72h/algae = 74000 µg/l

**13. DISPOSAL CONSIDERATIONS****Waste Disposal Methods:**

Use up product completely. Packaging material is industrial waste.

**Contaminated packaging:**

Cardboard boxes can be transported/delivered by a registered waste carrier to local recycling facilities..

**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:**

This product does not have to be classified according to the EU regulations.

**15. REGULATORY INFORMATION****16. OTHER INFORMATION****Text of R Phrases mentioned in Section 2**

R 8 - Contact with combustible material may cause fire.

R22 - Harmful if swallowed.

R36/37/38 - Irritating to eyes, respiratory system and skin.

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**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**