



# Material Safety Data Sheet

According to EC Directive 2001/58/EC

Print date: 27-Mar-2007

Revision Number: 2

Revision date: 27-Mar-2007

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

### Identification of the substance or preparation

MSDS Ref. No.: 8723.01.08  
Product name: Sierrablen 27+5+5+Fe  
Synonyms: Sierrablen 27+2.2+4.1+Fe

### Use of the Substance/Preparation

#### Company/Undertaking Identification

- Scotts International BV  
Nijverheidsweg 1-5  
6422 PD Heerlen (NL)  
Tel: ++31 (0) 45-5609100  
Fax: ++31 (0) 45-5609190

#### Emergency telephone number:

- +44 (0)208 762 8322

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical nature of the preparation

Components	CAS-No	Weight %	EC-No.	Classification
Ammoniumnitrate, NH <sub>4</sub> NO <sub>3</sub>	6484-52-2	10 - 25%	229-347-8	O;R08
Biuret	108-19-0	1 - 5%	203-559-0	Xi;R36/37/38
Calcium sulphate dihydrate, CaSO <sub>4</sub> +2H <sub>2</sub> O	10101-41-4	< 1%	231-900-3	NE
Ironsulphate, FeSO <sub>4</sub> +1H <sub>2</sub> O	7720-78-7	1 - 5%	231-753-5	Xn;R22
Magnesiumoxide, MgO	1309-48-4	< 1%	215-171-9	NE
Sulphur, S	7704-34-9	5 - 10%	231-722-6	F; R11 Xi;R36/37/38

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

## 3. HAZARDS IDENTIFICATION

### Classification

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

### Most important hazards

Revision date: 27-Mar-2007

Page 1 of 7

### 3. HAZARDS IDENTIFICATION

None

### 4. FIRST AID MEASURES

- General advice:** If you feel unwell, seek medical advice (show the label where possible).
- Ingestion:** 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. In case of respiratory difficulties practice oxygenotherapy. Possible symptoms are nausea and/or vomiting.
- Inhalation:** In case of shortness of breath, give oxygen. Possible symptoms are coughing and/or dyspnoea. Move to fresh air. If symptoms persist, call a physician.
- Skin contact:** If a person feels unwell or symptoms of skin irritation appear, consult a physician.
- Eye contact:** Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
- Protection of first-aiders:** Low hazard for usual industrial or commercial handling.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**

Water.

**Unsuitable extinguishing media:**

Dry powder, Sand, Foam

**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:**

In the event of fire and/or explosion do not breathe fumes. Wear self contained breathing apparatus for fire fighting if necessary. Evacuate area and fight fire from a safe distance.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Avoid dust formation. Ensure adequate ventilation.

**Environmental precautions:**

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

**Methods for cleaning up:**

Shovel or sweep up. Use up product completely. Packaging material is industrial waste.

### 7. HANDLING AND STORAGE

**Handling:**

**Technical measures/precautions:**

No special technical protective measures required.

<b>Safe handling advice:</b>	Keep away from open flames, hot surfaces and sources of ignition.
<b>Storage:</b>	
<b>Technical measures/storage conditions:</b>	Keep away from heat and sources of ignition. Keep away from food, drink and animal feeding stuffs. 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 .
<b>Incompatible products:</b>	Not applicable
<b>Specific use(s):</b>	Granulated fertilizer.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering measures to reduce exposure:</b>	Ensure adequate ventilation.
<b>Occupational exposure controls</b>	
<b>Personal protective equipment</b>	
<b>Respiratory protection:</b>	Not applicable.
<b>Hand protection:</b>	PVC or other plastic material gloves.
<b>Eye/face protection:</b>	Safety glasses.
<b>Skin and body protection:</b>	Usual safety precautions while handling the product will provide adequate protection against this potential effect.
<b>Hygiene measures</b>	Follow good housekeeping practices. When using, do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs.
<b>Exposure limit values</b>	
<i>Ammoniumnitrate, NH<sub>4</sub>NO<sub>3</sub></i> Czech Republic OEL	Listed
<i>Calcium sulphate dihydrate, CaSO<sub>4</sub>+2H<sub>2</sub>O</i> Austria - MAKs Belgium - 8 Hr VLE France INRS (VME) Germany TRGS900: Germany (DFG) - MAK  Netherlands - OEL - MACs: Portugal - TWAs Spain - Valores Limite Ambientales - VLE UK EH40 WEL:	6 mg/m <sup>3</sup> MAK 10 mg/m <sup>3</sup> VLE 10 mg/m <sup>3</sup> VME 6 mg/m <sup>3</sup> TWA 1.5 mg/m <sup>3</sup> MAK 4 mg/m <sup>3</sup> MAK 0.5 mg/m <sup>3</sup> MAC 10 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup> VLA-ED 10 mg/m <sup>3</sup> TWA 4 mg/m <sup>3</sup> TWA
<i>Ironsulphate, FeSO<sub>4</sub>+1H<sub>2</sub>O</i> Belgium - 8 Hr VLE Czech Republic OEL Finland - Occupational Exposure Limits - 8 hour Netherlands - OEL - MACs: Norway - 8 h: Portugal - TWAs	1 mg/m <sup>3</sup> Listed 1 mg/m <sup>3</sup> 1 mg/m <sup>3</sup> 0.01 mg/m <sup>3</sup> 1 mg/m <sup>3</sup> TWA

Spain - Valores Limite Ambientales - VLE  
UK EH40 WEL:

1 mg/m<sup>3</sup> VLA-ED  
LTEL (8 hr TWA) 1 mg/m<sup>3</sup>  
STEL (15 min) 2mg/m<sup>3</sup>

*Magnesiumoxide, MgO*

Austria - MAKs  
Belgium - 8 Hr VLE  
Czech Republic OEL  
France - Valeurs Limites d'exposition (VLE)  
France INRS (VME)  
Germany (DFG) - MAK  
Netherlands - OEL - MACs:  
Norway - 8 h:  
Portugal - TWAs  
Spain - Valores Limite Ambientales - VLE  
UK EH40 WEL:

6 mg/m<sup>3</sup>  
10 mg/m<sup>3</sup>  
Listed  
10 mg/m<sup>3</sup>  
10 mg/m<sup>3</sup> VME  
6 mg/m<sup>3</sup>  
10 mg/m<sup>3</sup>  
10 mg/m<sup>3</sup>  
10 mg/m<sup>3</sup> TWA  
10 mg/m<sup>3</sup> VLA-ED  
10 mg/m<sup>3</sup>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General Information

**Physical State:** Solid  
**Appearance:** Granular  
**Color:** Brown, Pink, Greenish  
**Odor:** No information available

### Important Health Safety and Environmental Information

**Flammability (solid, gas):** Non-flammable  
**Solubility:** Coating not soluble, release nutrients through coating

### Other information

**Bulk density:** 800 - 1100 kg/m<sup>3</sup>  
**Decomposition temperature:** > 150°C

## 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:** Oxidising agents.  
**Hazardous decomposition products:** No decomposition if stored normally  
Thermal decomposition can lead to release of irritating gases and vapours

## 11. TOXICOLOGICAL INFORMATION

### Component information

*Ammoniumnitrate, NH4NO3***LD50/oral/rat =** 410 mg/kg*Biuret***LD50/oral/rat =** > 5 g/kg*Ironsulphate, FeSO4+1H2O***LD50/oral/rat =** 1389 mg/kg*Sulphur, S***LD50/oral/rat =** > 2200 mg/kg**LD50/dermal/rat =** > 2000 mg/kg**LC50/inhalation/4h/rat =** > 5,4 mg/l**Other information on acute toxicity:** No information available**Product information****Local effects****Skin effects:** May cause skin irritation in susceptible persons.**Eye effects:** Contact with eyes may cause irritation.**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***Ammoniumnitrate, NH4NO3***Ecotoxicity effects**EC50/48h/daphnia =100 µg/l  
LC50/96h/rainbow trout =10 µg/l  
EC50/72h/algae = 74000 µg/l*Ironsulphate, FeSO4+1H2O***Ecotoxicity effects**EC50/48h/daphnia = >100mg/l  
LC50/96h/rainbow trout = >72.5mg/l (6d)  
EC50/72h/algae = 22mg/l

No ecological information is known on the product nor on any of its ingredients

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods:** Use up product completely. Packaging material is industrial waste  
**Contaminated packaging:** Empty containers can be landfilled, when in compliance with the local regulations

### 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.

### 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.

#### **Reason for revision:**

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

#### **Prepared by:**

Regulatory Affairs Department.

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

**End of Safety Data Sheet**