



# Safety Data Sheet

According to EC Directive 2001/58/EC

Print date: 19-Oct-2004

Revision Number: 1

Revision date: 19-Oct-2004

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

### Identification of the substance or preparation

**MSDS Ref. No.:** 4241.01.08  
**Product name:** Sierrablen 14+05+21+2MgO  
**Synonyms:** Sierrablen 14+2.2+17.4+1.2Mg

### Use of the Substance/Preparation

**Recommended use:** 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           |
|--|-----------|----------|--------------|--------------------------|
| 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 - 5%   | 215-171-9    | NE                       |
| Manganese sulphate, MnSO <sub>4</sub>              | 7785-87-7 | 1 - 5%   | 025-003-00-4 | N;R51/53<br>Xn;R48/20/22 |

**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

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

## 4. FIRST AID MEASURES

|                                    |   |
|------------------------------------|---|
| <b>General advice:</b>             | If you feel unwell, seek medical advice (show the label where possible).  |
| <b>Ingestion:</b>                  | 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. |
| <b>Inhalation:</b>                 | 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.  |
| <b>Skin contact:</b>               | If a person feels unwell or symptoms of skin irritation appear, consult a physician.  |
| <b>Eye contact:</b>                | Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.  |
| <b>Protection of first-aiders:</b> | Low hazard for usual industrial or commercial handling.   |

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**

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

**Extinguishing media which must not be used for safety reasons:**

No information available.

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

Thermal decomposition can lead to release of irritating gases and vapors.

**Special protective equipment for firefighters:**

Wear self contained breathing apparatus for fire fighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

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

**Environmental precautions:**

Should not be released into the environment.

**Methods for cleaning up:**

Shovel or sweep up. Do not create a powder cloud by using a brush or compressed air. Prevent product from entering drains. Sweep particles from driveways, curbs, etc. immediately following application, to prevent staining of concrete, metal and woodsurfaces. Keep away from swimmingpools.

## 7. HANDLING AND STORAGE

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

No special technical protective measures required.

**Safe handling advice:**

Keep away from open flames, hot surfaces and sources of ignition.

**Storage:**

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..

**Incompatible products:** Not applicable.

**Specific use(s):** Granulated fertilizer.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational exposure controls

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

### Personal protective equipment

**Respiratory protection:** Not applicable

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

**Eye protection:** Safety glasses.

**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.

### Exposure limit values

**Environmental exposure controls** No data available

#### *Ironsulphate, FeSO<sub>4</sub>·1H<sub>2</sub>O*

|   |                        |
|---|------------------------|
| 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 Hr:                                  | 0.01 mg/m <sup>3</sup> |
| UK EH40 MEL (TWA):                              | 1 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> |
| France - Valeurs Limites d'exposition (VLE) | 10 mg/m <sup>3</sup> |
| Germany (DFG) - MAK                         | 6 mg/m <sup>3</sup>  |
| Netherlands - OEL - MACs:                   | 10 mg/m <sup>3</sup> |
| Norway - 8 Hr:                              | 10 mg/m <sup>3</sup> |
| UK EH40 MEL (TWA):                          | 10 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 Hr:                                  | 2.5 mg/m <sup>3</sup> |
| UK EH40 MEL (TWA):                              | 5 mg/m <sup>3</sup>   |

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

### General Information

|                        |                       |
|------------------------|-----------------------|
| <b>Physical State:</b> | Solid                 |
| <b>Appearance:</b>     | granular              |
| <b>Color:</b>          | Brown, Pink, greenish |
| <b>Odor:</b>           | None                  |

**Important Health Safety and Environmental Information**

**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:** Combustible material, Flammable materials.

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

**11. TOXICOLOGICAL INFORMATION****Component information**

*Ironsulphate, FeSO<sub>4</sub>·1H<sub>2</sub>O*

**LD50/oral/rat =** 1185 mg/kg

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

**LD50/oral/rat =** 9 g/kg

**Other information on acute toxicity:** No information available

**Product information****Local effects**

**Skin irritation:** May cause skin irritation in susceptible persons.

**Eye irritation:** Contact with eyes may cause irritation.

**Inhalation** May cause sensitization by inhalation.

**Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea .

**Other information on acute toxicity:** No information available

**12. ECOLOGICAL INFORMATION****Product information**

**Component information***Ironsulphate, FeSO4+1H2O*

**Ecotoxicity:** EC50/48h/daphnia => 100 mg/l  
LC50/96h/rainbow trout =>72.5 mg/l (6d)  
EC50/72h/algae = 22 mg/l

*Magnesiumoxide, MgO*

**Ecotoxicity:** No information available

*Manganese sulphate, MnSO4*

**Ecotoxicity:** EC50/48h/daphnia => 100 mg/l

**Other information**

No ecological information is known on the product

**13. DISPOSAL CONSIDERATIONS**

**Waste from residues / unused products:** 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 regulated

**IATA**

**UN-No:** Not regulated

**IMO / IMDG**

**UN-No:** Not regulated

**15. REGULATORY INFORMATION****Indication of danger:**

The product is classified as dangerous in accordance with Directive 1999/45/EC.

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

**International Inventories**

| Components  | EC-No.       | EU - NLPL: | PICCS: | ENCS: | DSL:    | TSCA: | CHINA: | AICS: |
|---|--------------|------------|--------|-------|---------|-------|--------|-------|
| <i>Ironsulphate, FeSO<sub>4</sub>·1H<sub>2</sub>O</i> | 231-753-5    |            |        |       | Present | XU    |        |       |
| <i>Magnesiumoxide, MgO</i>                            | 215-171-9    |            |        |       | Present | XU    |        |       |
| <i>Manganese sulphate, MnSO<sub>4</sub></i>           | 025-003-00-4 |            |        |       | Present | XU    |        |       |

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

- R22 - Harmful if swallowed.
- R48/20/22 - Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
- R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Prepared by:** Regulatory Affairs Department.

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**End of Safety Data Sheet**