



Safety Data Sheet

According to EC Directive 2001/58/EC

Print date: 19-Oct-2004

Revision Number: 1

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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
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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 ₄ +1H ₂ 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 ₄	7785-87-7	1 - 5%	025-003-00-4	N;R51/53 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

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:

Use dry chemical, CO₂, 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, FeSO₄·1H₂O

Belgium - 8 Hr VLE	1 mg/m ³
Finland - Occupational Exposure Limits - 8 hour	1 mg/m ³
Netherlands - OEL - MACs:	1 mg/m ³
Norway - 8 Hr:	0.01 mg/m ³
UK EH40 MEL (TWA):	1 mg/m ³

Magnesiumoxide, MgO

Austria - MAKs	6 mg/m ³
Belgium - 8 Hr VLE	10 mg/m ³
France - Valeurs Limites d'exposition (VLE)	10 mg/m ³
Germany (DFG) - MAK	6 mg/m ³
Netherlands - OEL - MACs:	10 mg/m ³
Norway - 8 Hr:	10 mg/m ³
UK EH40 MEL (TWA):	10 mg/m ³

Manganese sulphate, MnSO₄

Belgium - 8 Hr VLE	0.2 mg/m ³
Finland - Occupational Exposure Limits - 8 hour	0.5 mg/m ³
Netherlands - OEL - MACs:	1 mg/m ³
Norway - 8 Hr:	2.5 mg/m ³
UK EH40 MEL (TWA):	5 mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES:

General Information

Physical State: Solid
Appearance: granular
Color: Brown, Pink, greenish
Odor: None

Important Health Safety and Environmental Information

Solubility: Coating not soluble, release nutrients through coating

Other information

Bulk density: 800 - 1100 kg/m³

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, FeSO₄·1H₂O

LD50/oral/rat = 1185 mg/kg

Manganese sulphate, MnSO₄

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, FeSO₄·1H₂O</i>	231-753-5				Present	XU		
<i>Magnesiumoxide, MgO</i>	215-171-9				Present	XU		
<i>Manganese sulphate, MnSO₄</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