

Material Safety Data Sheet

According to EC Directive 2001/58/EC

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

Identification of the substance or preparation

Product name: Evolution 4-0-7

Use of the Substance/Preparation

Recommended use: For use only as a horticultural turf treatment.

Company/Undertaking Identification

- See address on the bag

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the preparation

| Components | CAS-No | Weight % | EC-No. | Classification |
|--|------------|----------|-----------|----------------|
| Sand | 14808-60-7 | >25% | 238-878-4 | NE |
| Magnesite | 546-93-0 | 1 – 5% | 208-915-9 | NE |
| Ironsulphate, FeSO ₄ +1H ₂ O | 7720-78-7 | 10 – 25% | 231-753-5 | Xn; R22 |

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

None

4. FIRST AID MEASURES

General advice: If you feel unwell, seek medical advice (show the label where possible).

Ingestion: Rinse mouth. Do not induce vomiting. If symptoms persist, call a physician.

Inhalation: Move person to fresh air. If symptoms persist, call a physician.

Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.

Eye contact: Rinse immediately with plenty of water, also under the eyelids. If symptoms persist, call a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Carbon dioxide (CO₂). Dry powder. Water spray mist or foam.

Unsuitable extinguishing media:

High volume water jet

Special protective equipment for firefighters:

Use personal protective equipment. In the event of fire, wear self-contained breathing apparatus.

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.

Environmental precautions:

Prevent product from entering drains. Do not flush into surface water or sanitary sewer 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: Ensure adequate ventilation.

Safe handling advice: Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands and exposed skin after use / handling.

Storage:

Technical measures/storage conditions: Store in original container. Keep container tightly closed. Keep in a dry, cool place.

Incompatible products: None known

Specific use(s): No information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure: Ensure adequate ventilation.

Occupational exposure controls

Personal protective equipment

Respiratory protection: Effective dust mask.

Hand protection: Protective gloves. Nitrile rubber.

Eye/face protection: Safety glasses with side shields.

Skin and body protection: Lightweight protective clothing.

Hygiene measures When using, do not eat, drink or smoke. Wash hands before stopping and immediately after handling..

Exposure limit values

Sand

UK EH40 WEL: LTEL (8Hr) 6mg/m³ (total inhalable dust)
STEL (15min) 2.4 mg/m³ (total respirable dust)

Ironsulphate, FeSO₄·1H₂O

Belgium - 8 Hr VLE 1 mg/m³
Finland - Occupational Exposure Limits - 8 hour 1 mg/m³
Netherlands - OEL - MACs: 1 mg/m³
Norway - 8Hr: 0.01 mg/m³
UK EH40 WEL: LTEL (8Hr) 1mg/m³
STEL (15min) 2mg/m³

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Physical State: Granules
Color: Grey, Brown
Odor: slight, metallic

Important Health Safety and Environmental Information

pH: 5 – 7 (1% solution)

Other information

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions
Conditions to avoid: None known.
Materials to avoid: None known
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 = 750mg/kg

Product information

Local effects

Skin effects: Non-irritating to the skin.
Eye effects: Not irritating.
Inhalation: Not irritating.
Ingestion: Not irritating.

12. ECOLOGICAL INFORMATION

Product information

Component information

Sand
Ecotoxicity: No information available

Magnesite
Ecotoxicity: No information available

Ironsulphate, FeSO₄+1H₂O
Ecotoxicity: EC50/48h/daphnia => 100 mg/l
LC50/96h/rainbowtrout => 72.5 mg/l (6d)
EC50/72h/algae = 22 mg/l

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of in accordance with local regulations.

Contaminated packaging: Do not re-use empty containers. Dispose of as unused product.
In accordance with local and national regulations.

14. TRANSPORT INFORMATION

Product information

| | |
|--------------------------|------------------------------|
| Physical State: | Granules |
| <u>ADR/RID</u> | |
| UN-No: | Not classified for transport |
| <u>IATA</u> | |
| UN-No: | Not classified for transport |
| <u>IMO / IMDG</u> | |
| UN-No: | Not classified for transport |

15. REGULATORY INFORMATION

Indication of danger:

None.

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 2

None

This safety data sheet provides health and safety information. The product is to be used in applications consistent with best practice. Individuals handling this product should be informed under COSHH of their recommended safety precautions and should have access to this information. The product information in this data sheet is to the best of our knowledge correct as at the date of publication. Neither the FMA nor the Manufacturer, UKASTA or Supplier accepts liability for any loss or damage (other than that arising from death or personal injury caused by negligence if proved) resulting from reliance on this information. Further information on individual products covered by this safety data sheet may be obtained from the Supplier or the Company whose name, address and telephone number will be found on the fertilizer bag.