



SAFETY DATA SHEET

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

Product	Epson Salts
Usage	Fertiliser/ Plant nutrient
Supplier	Westland Horticulture Ltd 14 Granville Industrial Estate Granville Road Dungannon County Tyrone BT70 1NJ
Email	customerservice@WestlandHorticulture.com
Emergency Tel	01480 443789 (UK)

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture According to Regulation (EC) No 1272/2008:

Not classified

Classification of the Substance or Mixture According to Directive 67/548/EEC or Directive 1999/45/EC:

Not classified

Label Elements According to Regulation (EC) No 1272/2008:

Hazard Pictograms	None
Signal Word	None
Hazard Statements	Not applicable
Precautionary Statements	Not applicable
Other hazards	Not applicable



3. COMPOSITION/INFORMATION ON INGREDIENTS

Description

Substance

Magnesium Sulphate Heptahydrate ($\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$) is not classified as a hazardous substance (CAS 10034-99-8; EC 231-298-2)

4. FIRST AID MEASURES

General Advice: Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or physician, or going for treatment.

Inhalation: Move person to fresh air.
Keep patient warm and at rest.

Skin Contact: Wash off with soap and plenty of water.

Eye Contact: Rinse cautiously with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses and continue flushing.
If eye irritation persists, consult a specialist

Ingestion: Rinse out mouth with water and drink plenty of water afterwards

Most important symptoms and effects: Ingestion may provoke diarrhoea

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

The product is not flammable. Suitable extinguishing media for the surrounding fire should be used

Extinguishing Media Which Must Not Be Used For Safety Reasons:

None

Specific Hazards Arising From the Substance or Mixture:

Fire will produce toxic and corrosive products of combustion such as Sulphur Dioxide (SO_2)
Exposure to decomposition products may be a hazard to health

Special Protective Equipment for Fire Fighters:

Wear full protective clothing and self-contained respiratory apparatus.

Further Information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains



6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid formation / breathing of dust

Environmental Precautions:

Avoid release to the environment

Do not allow to enter surface or ground water or sanitary sewer system.

Methods and Materials for Containment and Cleaning Up:

Sweep up and shovel into suitable containers for disposal according to local / national regulations

Wash the spillage area with water

Additional Advice: If large quantities of the product contaminates water courses or drains (including via contaminated soil & vegetation), inform respective authorities.

Reference to other sections:

See section 7 for information on safe handling

See Section 8 for information on personal protection equipment

See Section 13 for disposal information

7. HANDLING AND STORAGE

Handling:

- Prevent dust formation and inhalation
- Avoid contact with eyes and skin
- Do not eat, drink or smoke when using this product
- Wash hands and observe good hygiene practice after handling this product

Storage:

- Keep containers closed tightly in a dry, cool and well-ventilated place.
- No special restrictions on storage with other products

Specific End Uses:

Use as fertiliser according to the instruction on the label



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Contains no substances with occupational exposure limit values

Exposure Controls

Engineering Measures: Avoid high dust concentration and provide ventilation where necessary to ensure that the occupational exposure limit is not exceeded

Protective Measures: The use of technical measures should always have priority over the use of personal protective equipment
When selecting personal protective equipment, seek appropriate professional advice
Personal protective equipment should be certified to appropriate standards

Respiratory Protection: Wear suitable dust mask with filter type P1 if dust concentration is high

Hand Protection: Not required under normal use.

Eye Protection: Wear safety glasses if dust concentration is high

Skin and Body Protection: Not required under normal use. Protecting work clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White crystalline solid

Odour: Very faint

Other Properties:

	Value	Temperature
pH (100g/l)	~8	25 °C
Bulk density	1.0 g/ml	
Melting temperature	770 °C	

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of storage, handling and use

Hazardous Reactions: None known under normal conditions of use

Hazardous Decomposition: Heating or fire can release toxic or irritant vapours (Sulphur oxides)

Conditions To Avoid: None known

Incompatible Materials: None known

11. TOXICOLOGICAL INFORMATION

Information given is based on data obtained from of similar substances

Acute Oral Toxicity: LD50 Median lethal dose rat, >2,000 mg/kg

Acute Inhalation Toxicity: Information not available

Acute Dermal Toxicity: LD50 Median lethal dose rat, >2,000 mg/kg

Skin Irritation: No skin irritation

Eye Irritation: No eye irritation, rabbit

Respiratory or Skin Sensitization: Does not cause skin sensitization, mouse

Long Term Toxicity: Epson salts did not show mutagenic, teratogenic, carcinogenic or reproductive toxicity effects in animal experiments.

STOT- repeated exposure: NOAEL \geq 256 mg/kg, rat. No adverse effect has been observed in chronic toxicity tests

12. ECOLOGICAL INFORMATION

Toxicity

The toxicity data is based on test results obtained with similar products

- **Toxicity To Fish:** LC50 Pimephales promelas (fathead minnow), 680 mg/l, 96h
- **Toxicity To Aquatic Invertebrates:** EC50 Daphnia magna (water flea), 720 mg/l, 48h
- **Toxicity To Aquatic Plants:** EC50 Chlorella vulgaris (fresh water algae), 2700 mg/l, 18d
- **Toxicity to bacteria:** EC50 Photobacterium phosphoreum, 84 mg/l, 0.5h

Persistence and Degradability

- **Biodegradability:** Not applicable

Bioaccumulative Potential: Not applicable

Mobility in soil: Not applicable

Results of PBT and vPvB assessment: Epson salts are not identified as PBT nor vPvB substance



13. DISPOSAL CONSIDERATIONS

- Product:** Do not contaminate ponds, waterways or ditches with product or used container. Check if agriculture use is possible. Dispose of by use on farm as a fertiliser, by spreading thinly on open ground
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.
- Contaminated Packaging:** Empty remaining contents.
Completely empty containers can be put in the bin or disposed of in compliance with applicable local regulations

14. TRANSPORT INFORMATION

- Land Transport (ADR /RID)** Not dangerous goods
- Maritime Transport (IMDG)** Not dangerous goods
- Air Transport (IATA-DGR)** Not dangerous goods

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance of mixture:

This mixture is classified in accordance with Directive 1999/45/EC, regulation 1272/2008 and the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations

The mixture is also regulated by the following legislation:

EC Directives: 76/116/EEC (Relating to fertilisers)

National Regulations: The Fertilisers Regulations 1991 and subsequent amendments

Chemical Safety Assessment: A Chemical Safety Assessment is not required for this substance



16. OTHER INFORMATION

Recommended uses and restrictions: Follow the instructions

Abbreviations and Acronyms

ADR	International Carriage of Dangerous Goods by Road
bw	By weight
CAS No	Chemicals Abstract Service Registry Number
EC No	European Community Number for chemicals within EU regulations
EC50	Half Maximal Effective Concentration
IATA-DGR	Dangerous Goods Regulations by the International Air Transport Association
IMDG Code	International Maritime Dangerous Goods Code
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic Properties
Regulation (EC) No 1272/2008	Classification, Labelling and Packaging
RID	International Transport of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative Properties

Further information

Before using this product, ensure that you read and understand its label

MSDS information:

This Safety Data Sheet is prepared in compliance with Directive 1999/45/EC, 1272/2008 and Annex I of the REACH regulation 453/2010.

This safety data sheet provides health and safety information. This product is to be used in applications with best use practice. Individuals handling this product should be informed under COSHH of the 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. Westland Horticulture Limited does not accept responsibility for damage caused by incorrect use of this information.

Training and related advice:

This document contains important information to ensure the safe storage, handling and use of this product. It is the responsibility of your organisation to ensure that the information contained in this document is communicated to the end user and that all necessary training to enable the product to be used correctly has been given.

For further information please contact Westland Horticulture Ltd, 14 Granville Industrial Estate, Granville Road, Dungannon, County Tyrone, BT70 1NJ.