



Kieserite (Magnesium Sulphate)

Issue Date: 23-Feb-18

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Revision Number: 1

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

1.1 Name of Product

Kieserite (Magnesium Sulphate)

1.2 Use of the Substance/Preparation

Fertiliser

1.3 Manufacturer/Distributor

Thomas Elliott (Fertilisers)
 Selby Place
 Stanley Industrial Estate
 Skelmersdale
 WN8 8EF
 Tel: 01695 51875
 Email: info@thomas-elliott.co.uk

1.4 Emergency Contact

Tel: 01695 51875 (Office Hours)

2.1 Classification

Classification according to Directive EC 1272/2008 Classification, Labelling and Packaging.

Physical hazards

Not Classified

Health hazards

Not Classified

Environmental hazards

Not Classified

2.2 Label elements

Not Applicable

2.3 Other hazards

Substance not classed as PBT or vPvB.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Ingredient	CAS/EINECS	Classification	% w/w
Magnesium Sulphate	7487-88-9 231-298-2	None	N/A

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

Eye contact – Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin contact – Wash exposed areas of skin with soap and water following use. Wash all contaminated clothing before re-use.

Ingestion – Wash out mouth with water and drink plenty of water. Call poison center or doctor if symptoms are severe or persist.

Inhalation – Remove to fresh air.

4.2 Most important symptoms and effects, both acute and delayed

Eye Contact: Product is considered to present little hazard by eye contact.

Skin Contact: Product is considered to present little hazard by skin contact.

Ingestion: May provoke the following symptoms: diarrhoea.

Inhalation: Unlikely to cause harmful effects under normal handling and use.

4.3 Indication of immediate medical attention and special treatment needed

Treat symptomatically

5. FIRE FIGHTING MEASURES

5.1 Extinguishing Media

Use foam, dry powder, sand. The mixture is not classified as flammable. As such extinguishing media appropriate for surrounding materials should be chosen.

5.2 Special hazards arising from substance or mixture

Heating or fire can release toxic gas: sulphur oxides.

5.3 Advice for firefighters

Contain spread of extinguishing fluids. Wear self-contained breathing apparatus in confined spaces.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

Ensure adequate ventilation. Wear protective gloves and eye protection. Wash hands and exposed skin after handling.

6.2 Environmental precautions

Do not allow to enter drains or sewers. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

6.3 Methods and material for containment and cleaning up:

Sweep up and shovel product or use other means and place in container for reuse (preferred) or disposal.

7. HANDLING & STORAGE

7.1 Precautions for Safe Handling

Ensure good ventilation at workplace. Ensure good hygiene practices are observed. Do not eat, drink or smoke when handling this product. Do not breathe dust. Avoid contact with skin and eyes. Ensure workplace exposure limits are observed. Do not block stack pallets.

7.2 Conditions for Safe Storage

Keep in a cool, well-ventilated place.
No special restrictions on storage with other products.
Stable under recommended storage conditions.

7.3 Specific end use

Fertiliser

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure Controls:

The following precautions are considered to be good practice when using any

chemicals irrespective of their classification unless otherwise specified.

Respiratory protection: effective dust mask with filter type P1. Do not breathe dust.

Gloves: not required under normal use.

Clothing: not required. Wear suitable protective clothing.

Hygiene measures: When using do not eat or drink. Wash hands before breaks and at the end of workday.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance	Crystalline solid powder, light grey
Odour	Odourless
pH	8 - 10 at 25°C, aqueous solution
Boiling point	Decomposes at >700°C
Melting point	700°C
Flash point	n/a
Flammability	The product is not flammable.
Autoflammability	n/a
Explosivity	n/a
Oxidising properties	n/a
Vapour Pressure	n/a
Density	2.6g/cm ³
Solubility	342g/L

9.2 Other Information:

Bulk density	1280 – 1380 kg/m ³
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10. STABILITY & REACTIVITY

10.1 Reactivity

Stable.

10.2 Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No dangerous reaction known under normal conditions of use.

10.4 Conditions to Avoid

None known.

10.5 Incompatible materials

None known.

10.6 Hazardous Decomposition Products

No decomposition if stored and applied as directed. Heating or fire can release toxic gas: sulphur oxides.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute toxicity

Not Classified (based on available data, the classification criteria are not met)

Magnesium sulphate (7487-88-9)

Oral LD50	>2,000	mg/kg (rat)
Dermal LD50	>2,000	mg/kg (rat)

Primary irritant effect

Skin Corr/Irrit	Not classified
Eye damage/irritation	Not classified
Respiratory or skin sensitisation	Not classified

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

There are no indications of CMR effects (Based on available data, the classification criteria are not met)

Mutagenicity

Not Classified (Based on available data, the classification criteria are not met)

Carcinogenicity

Not Classified (Based on available data, the classification criteria are not met)

Toxicity for reproduction

Not Classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity (STOT)

Not Classified (Based on available data, the classification criteria are not met)

Aspiration hazards

Not classified (Not specifically applicable)

12. ECOLOGICAL INFORMATION**12.1 Toxicity****12.1 Toxicity**

The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment

Magnesium Sulphate (7487-88-9)

LC50 fish 1	680 mg/l (static; 96 h; Pimephales promelas)
EC50 Daphnia 1	720 mg/l (static; 48 h; daphnia magna)

12.2 Persistence and degradability

Biodegradability: not applicable

12.3 Bioaccumulative potential

Bioaccumulation: not applicable

12.4 Mobility in soil

Physico-chemical removability: not applicable

12.5 Results of PBT and vPvB

The product does not contain any substances classified as PBT or vPvB.

12.6 Other adverse data

Adsorbed organic bound halogens (AOX): not applicable

13. DISPOSAL CONSIDERATIONS

Check if agricultural use is possible.

13.1 Waste treatment methods

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

14. TRANSPORT INFORMATION**14.1 UN-Number**

ADR, IMDG, IATA	Not applicable
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- 14.2 UN proper shipping name
ADR, IMDG, IATA Not applicable
- 14.3 Transport hazard class(es)
ADR, IMDG, IATA Not applicable
- 14.4 Packaging Group
ADR, IMDG, IATA Not applicable
- 14.5 Environmental hazards
Not a marine pollutant
- 14.6 Special precautions for user
None
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable

15. REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific to this substance:
This substance is exempt from registration according to Regulation (EC) No. 1907/2006 (REACH).
- 15.2 Chemical Safety Assessment
Not undertaken for this material

16. OTHER INFORMATION

Reason for revision

MSDS re-formatted in-line with regulation 453/2010 all sections affected.

Liability

The product label provides information on the use of the product: do not use otherwise, unless you have assessed any potential hazard involved and the safety measures required. Prepared by Thomas Elliott (Fertilisers), for Health and Safety purposes from the best knowledge available at the time of printing.