

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier:

Magnesium

1.2 Relevant uses of the substance or mixture and uses advised against:

Supplied for use as a fertilizer

1.3 Details of the supplier of the safety data sheet:

Chempak Products
Thompson & Morgan
Poplar Lane
Ipswich
Suffolk
IP8 3BU

Contact: The Safety Officer

Telephone Number: 01473 588688 (Monday – Friday 8am to 5pm)

Or visit www.chempak.com

1.4 Emergency telephone number:

Emergency Telephone Number: 01473 588688 (Monday – Friday 8am to 5pm)

2. Hazards identification

2.1 Classification of the substance or mixture

CLASSIFICATION according to Regulation (EC) 1272/2008 Classification, Labelling and Packaging

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

CLASSIFICATION according to Directive 1999/45/EC and statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulation

Not a hazardous substance or mixture according to Directive 1999/45/EC.

2.2 Label Elements

No labelling elements according to Regulation (EC) No. 1272/2008.

2.3 Other Hazards

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

3. Composition/information on ingredients

3.1 Substances

Chemical Name	CAS-No./ EINECS-No.	Annex Index or REACH number	Symbol(s)	Phrase(s)	Concentration [%]
Magnesium Sulphate Heptahydrate (MgSO ₄ ·7H ₂ O)	10034-99-8 231-298-2		According to 1272/2008: None According to 67/548/EEC: None	According to 1272/2008: None According to 67/548/EEC: None	>99

All hazard information if not displayed in section 2 or 3 is displayed in Section 16.

4. First aid measures

4.1 Description of first aid measures

4.1.1 Inhalation

If inhaled, move person into fresh air. Seek medical attention if symptoms persist or develop.

4.1.2 Skin & Eye exposure

Skin: Wash off with soap and water

Eyes: Rinse thoroughly with plenty of water for at least 15 minutes. Seek medical attention if symptoms persist or develop.

4.1.3 Ingestion

Wash out mouth with water and give water to drink. Seek medical attention if symptoms persist or develop.

4.2 Most important symptoms and effects, both acute and delayed

Ingestion may provoke the following symptoms:

Diarrhoea

4.3 Indication of any immediate medical attention and special treatment needed.

Get medical attention if symptoms occur. Show this safety data sheet to the doctor in attendance.

For specialist advice, physicians should contact the Poisons Information Service.

5. Firefighting measures

5.1 Extinguishing media

The product is not classified as flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special Hazards arising from the substance or mixture

Heating or fire can release toxic gas; sulphur oxides.

5.3 Advice for fire-fighters

In the event of fire, wear self-contained breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing dust.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.

6.4 Reference to other sections

For personal protection see section 8.

7. Handling and storage

7.1 Precaution for safe handling

Avoid dust formation. Avoid inhalation, ingestion and contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a dry place. There are no special restrictions on storage with other products.

7.3 Specific end use(s)

Always read the label and product information before use.

8. Exposure controls and personal protection

8.1 Control Parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering controls:

Provide adequate ventilation.

Personal protective equipment:

Respiratory protection: Effective dust mask.

Hand protection: Not required under normal use.

Eye protection: Safety glasses.

Skin and body protection: Wear suitable protective clothing.

Hygiene measures:

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

Protective measures:

Do not breathe dust.

Environmental exposure controls:

General advice: Do not let product enter drains.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance; Crystalline

Odour; Very faint

Odour threshold; Information not available

pH; ca. 8, at 25°C, Aqueous solution

Melting point; 770°C

Initial boiling point and boiling range; Not applicable

Flash point; Not applicable

Evaporation rate; Not applicable

Flammability (solid, gas); The product is not flammable

Upper /lower flammability or explosive limits; Not applicable

Vapour Pressure; Not applicable

Density; 1.7g/cm³

Specific gravity; Information not available

Water solubility; MgSO₄: 342 g/l, 20 °C

Partition coefficient: n-octanol/water; Information not available

Auto ignition temperature: Not auto-flammable

Decomposition temperature: Information not available

9.2 Other Information

Bulk density: ca. 980 kg/m³

10. Stability and reactivity

10.1 Reactivity

Stable.

10.2 Chemical Stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

No dangerous reactions known under conditions of normal 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

Product:

Acute oral toxicity:	LD50: > 2.000 mg/kg, rat, OECD 425, Information given is based on data obtained from similar substances.
Acute inhalation toxicity:	Information not available.
Acute dermal toxicity:	> 2.000 mg/kg, rat, OECD Test Guideline 402, Information given is based on data obtained from similar substances.
Skin corrosion/irritation:	Result: No skin irritation, EU Method B.46, Information given is based on data obtained from similar substances.
Serious eye damage/irritation:	Rabbit, Result: No eye irritation, OECD Test Guideline 405, Information given is based on data obtained from similar substances.
Respiratory/skin sensitization:	Mouse, Result: Does not cause skin sensitization, OECD Guideline 429, anhydrous substance.
Germ cell mutagenicity	
Genotoxicity in vitro:	Result: negative, OECD 476, anhydrous substance.
Genotoxicity in vivo:	Information not available.
Carcinogenicity:	Information not available. According to experience, not expected.
Reproductive toxicity:	Rat, NOAEL: \geq 1.500 mg/kg, OECD Guideline 422, Information given is based on data obtained from similar substances. Assessment: Animal testing did not show any effects on fertility.
Teratogenicity:	Rat, NOAEL: \geq 1.500 mg/kg, OECD Guideline 422, Information given is based on data obtained from similar substances. Assessment: Did not mutagenic or teratogenic effects in animal experiments.
STOT – repeated exposure:	Rat, NOAEL: \geq 256 mg/kg, OECD Test Guideline 453, Information given is based on data obtained from similar substances.
Further information:	Health injuries are not known or expected under normal use.

12. Ecological information

12.1 Toxicity

Product:

Toxicity to fish: LC50: 680 mg/l, 96 h, Pimephales promelas (fathead minnow), Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates: LC50: 720 mg/l, 48 h, Information given is based on data obtained from similar substances.

Toxicity to algae: EC50: 2.700 mg/l, 18 d, Chlorella vulgaris (Fresh water algae), Information given is based on data obtained from similar substances.

Toxicity to bacteria: EC50: 84 mg/l, 0,5 h, Photobacterium phosphoreum.

12.2 Persistence and degradability

Not applicable.

12.3 Bioaccumulative potential

Not applicable.

12.4 Mobility in soil

Not applicable.

12.5 Results of PBT and vPvB

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

Information not available.

13. Disposal considerations

13.1 Waste Treatment Methods

Check if agriculture use is possible. 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: Non-dangerous goods

14.2 UN proper shipping name: No information available

14.3 Transport hazard: No information available

14.4 Packing group: No information available

14.5 Environmental hazards: No information available

14.6 Special precautions for user: No information available

14.8 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: No information available

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture. This substance/mixture is classified and labelled in accordance with Regulation EC 1272/2008, Directive 1999/45/EC, the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations and the EC Fertiliser Regulations 2003, Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Water contaminating class (Germany): WGK 1 slightly water endangering.

This substance is exempt from registration according to Regulation (EC) No. 1907/2006 (REACH).

15.2 Chemical Safety Assessment
CSA not required for this product

16. Other information

SDS information:

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

The information given herein is, to the best of our knowledge, correct and is presented in good faith but no warranty, expressed or implied is given.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty of quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.