

# SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended 2015/830.

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name:** Magnesium Sulphate, Heptahydrate  
**Product No.** 2500, P138, 2504

### Additional identification

**Chemical name:** Magnesium sulphate, heptahydrate  
**Chemical formula:** MgSO<sub>4</sub>·7H<sub>2</sub>O  
**INDEX No.** -  
**CAS-No.** 10034-99-8  
**EC No.** 242-691-3  
**REACH Registration No.**

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Identified uses:** For Laboratory, Research or Manufacturing Use.  
**Uses advised against:** Not determined.

### 1.3 Details of the supplier of the safety data sheet

Avantor Performance Materials Poland S.A.  
Sowinskiego 11str., 44-101 Gliwice,  
Poland

**Telephone:** 48 32 239-20-00  
**Fax:** 48 32 239-23-70

**Contact person:** Product Information Compliance  
**E-mail:** export@avantormaterials.com

E-mail address of person responsible for this SDS: SDS@avantormaterials.com

### 1.4 Emergency telephone number: CHEMTREC: (44)-870-8200418

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product has not been classified as hazardous according to the legislation in force.

**Classification according to Regulation (EC) No 1272/2008 as amended.**

Not classified

**2.2 Label Elements** Not applicable

**2.3 Other hazards** No data available.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Magnesium sulphate, heptahydrate	100,00%	10034-99-8	242-691-3	No data available.	No data available.	

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# This substance has workplace exposure limit(s).

## SECTION 4: First Aid Measures

**General:** Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

### 4.1 Description of first aid measures

**Inhalation:** Move to fresh air. Get medical attention if symptoms persist.

**Skin Contact:** Wash skin thoroughly with soap and water. If skin irritation or an allergic skin reaction develops, get medical attention. Wash contaminated clothing before re-use.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

**Ingestion:** Rinse mouth thoroughly. Call a POISON CENTRE/doctor if you feel unwell.

**4.2 Most important symptoms and effects, both acute and delayed:** May cause irritation to skin, eyes and respiratory tract.

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

**Hazards:** No data available.

**Treatment:** Treat symptomatically. Symptoms may be delayed.

## SECTION 5: Firefighting Measures

**General Fire Hazards:** The product is non-combustible.

### 5.1 Extinguishing media

**Suitable extinguishing media:** The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** None known.

**5.2 Special hazards arising from the substance or mixture:** None known.

### 5.3 Advice for firefighters

**Special fire fighting procedures:** Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

**Special protective equipment for firefighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

## SECTION 6: Accidental Release Measures

- 6.1 Personal precautions, protective equipment and emergency procedures:** See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust. Keep unauthorised personnel away.
- 6.2 Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Avoid discharge into drains, water courses or on to the ground.
- 6.3 Methods and material for containment and cleaning up:** Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.
- 6.4 Reference to other sections:** No data available.

## SECTION 7: Handling and Storage:

- 7.1 Precautions for safe handling:** Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Do not breathe dust. Wash hands thoroughly after handling.
- 7.2 Conditions for safe storage, including any incompatibilities:** Keep containers tightly closed. Store in a well-ventilated place.
- 7.3 Specific end use(s):** No data available.

## SECTION 8: Exposure Controls/Personal Protection

**8.1 Control Parameters Occupational Exposure Limits**  
None of the components have assigned exposure limits.

**8.2 Exposure controls Appropriate Engineering Controls:** No data available.

### Individual protection measures, such as personal protective equipment

**General information:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

**Eye/face protection:** Wear safety glasses with side shields (or goggles). Use tight fitting goggles if dust is generated.

### Skin protection

<b>Hand Protection:</b>	Material: Chemical resistant gloves
<b>Other:</b>	Wear suitable protective clothing.
<b>Respiratory Protection:</b>	In case of inadequate ventilation use suitable respirator. Air-purifying respirator with a high efficiency particulate filter.
<b>Hygiene measures:</b>	Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Avoid contact with eyes, skin, and clothing.
<b>Environmental Controls:</b>	No data available.

## SECTION 9: Physical And Chemical Properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state:</b>	solid
<b>Form:</b>	Crystalline powder
<b>Colour:</b>	Colourless
<b>Odour:</b>	Odourless
<b>Odour Threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting Point:</b>	No data available.
<b>Boiling Point:</b>	No data available.
<b>Flash Point:</b>	Not applicable
<b>Evaporation Rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Flammability limit - upper (%)</b>	No data available.
<b>Flammability limit - lower (%)</b>	No data available.
<b>Vapour pressure:</b>	No data available.
<b>Vapour density (air=1):</b>	No data available.
<b>Density:</b>	1,67 g/ml (20 °C)
<b>Relative density:</b>	1,67 (20 °C)
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	Soluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Autoignition Temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.
<b>Explosive properties:</b>	No data available.
<b>Oxidising Properties:</b>	No data available.

### 9.2 Other information

<b>Molecular weight:</b>	246,47 g/mol (MgSO <sub>4</sub> .7H <sub>2</sub> O)
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## SECTION 10: Stability and Reactivity

<b>10.1 Reactivity:</b>	No data available.
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<b>10.2 Chemical Stability:</b>	Material is stable under normal conditions.
<b>10.3 Possibility of Hazardous Reactions:</b>	Hazardous polymerization does not occur.
<b>10.4 Conditions to Avoid:</b>	Contact with incompatible materials.
<b>10.5 Incompatible Materials:</b>	Strong oxidising agents.
<b>10.6 Hazardous Decomposition Products:</b>	Oxides of sulfur. Oxides of magnesium.

## SECTION 11: Toxicological Information

### Information on likely routes of exposure

<b>Inhalation:</b>	None known or expected under normal use.
<b>Skin Contact:</b>	None known or expected under normal use.
<b>Eye contact:</b>	None known or expected under normal use.
<b>Ingestion:</b>	None known or expected under normal use.

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Oral

**Product:** LD 50 (Rat): > 4.100 mg/kg

##### Dermal

**Product:** LD 50 (Rat) > 4.100 mg/kg

##### Inhalation

**Product:** No data available.

#### Repeated dose toxicity

**Product:** No data available.

#### Skin Corrosion/Irritation:

**Product:** May cause skin irritation.

#### Serious Eye Damage/Eye Irritation:

**Product:** May irritate eyes.

#### Respiratory or Skin Sensitisation:

**Product:** Not a skin sensitiser.

#### Germ Cell Mutagenicity

##### In vitro

**Product:** No mutagenic components identified

##### In vivo

**Product:** No mutagenic components identified

#### Carcinogenicity

**Product:** This substance has no evidence of carcinogenic properties.

**Reproductive toxicity**

**Product:** No components toxic to reproduction

**Specific Target Organ Toxicity - Single Exposure**

**Product:** None known.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** None known.

**Aspiration Hazard**

**Product:** Not classified

**Other Adverse Effects:** None known.

<b>SECTION 12: Ecological Information</b>
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**12.1 Toxicity**

**Acute toxicity**

**Fish**

**Product:** LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 2.610 mg/l

**Aquatic Invertebrates**

**Product:** No data available.

**Chronic toxicity**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to aquatic plants**

**Product:** No data available.

**12.2 Persistence and Degradability**

**Biodegradation**

**Product:** The product is not readily biodegradable.

**BOD/COD Ratio**

**Product:** No data available.

**12.3 Bioaccumulative Potential**

**Product:** No data available on bioaccumulation.

**12.4 Mobility in Soil:**

The product is water soluble and may spread in water systems.  
**Known or predicted distribution to environmental compartments**

**12.5 Results of PBT and vPvB assessment:** Not available.

**12.6 Other Adverse Effects:** The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**12.7 Additional Information:** No data available.

## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods

**General information:** No data available.

**Disposal methods:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

## SECTION 14: Transport Information

### ADR

14.1 UN Number: Not regulated.  
 14.2 UN Proper Shipping Name: Not regulated.  
 14.3 Transport Hazard Class(es)  
     Class: Not regulated.  
     Label(s): Not regulated.  
     Hazard No. (ADR): Not regulated.  
     Tunnel restriction code: Not regulated.  
 14.4 Packing Group: Not regulated.  
 14.5 Environmental Hazards: Not regulated.  
 14.6 Special precautions for user: Not regulated.

### RID

14.1 UN Number: Not regulated.  
 14.2 UN Proper Shipping Name: Not regulated.  
 14.3 Transport Hazard Class(es)  
     Class: Not regulated.  
     Label(s): Not regulated.  
 14.4 Packing Group: Not regulated.  
 14.5 Environmental Hazards: Not regulated.  
 14.6 Special precautions for user: Not regulated.

### IMDG

14.1 UN Number: Not regulated.  
 14.2 UN Proper Shipping Name: Not regulated.  
 14.3 Transport Hazard Class(es)  
     Class: Not regulated.  
     Label(s): Not regulated.  
     EmS No.: Not regulated.  
 14.4 Packing Group: Not regulated.  
 14.5 Environmental Hazards: Not regulated.  
 14.6 Special precautions for user: Not regulated.  
 Not regulated.

## IATA

14.1 UN Number:	Not regulated.
14.2 Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:** Not applicable

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

#### EU Regulations

**Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer:** none

**Regulation (EC) No. 850/2004 on persistent organic pollutants:** none

**Regulation (EC) No. 649/2012 Import and export of dangerous chemicals:** none

**Regulation (EC) No. 1907/2006 REACH Annex XIV Substance subject to authorisation, as amended:** none

**Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:** none

**Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.:** none

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.:** none

**Directive 2012/18/EU (Seveso III): on the control of major accident hazards involving dangerous substances:** none

**EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:** none

**Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:** none

**15.2 Chemical safety assessment:** No Chemical Safety Assessment has been carried out.

## SECTION 16: Other Information

**Revision Information:** Not relevant.

#### References

PBT	PBT: persistent, bioaccumulative and toxic substance.
vPvB	vPvB: very persistent and very bioaccumulative substance.

**Key literature references and sources for data:** Sources of information used in preparing this SDS included one or more of the following: results from in house or supplier toxicology studies, information from the Toxicology Data Network (TOXNET), European Chemical Agency (ECHA) substance dossiers, IARC Monographs, US National Toxicology Program data, the Agency for Toxic Substances and Disease Registry, other manufacturer's SDSs and other sources, as appropriate.

**Wording of the H-statements in sections 2 and 3:** none

**Training information:** No data available.

**Issue Date:** 08.05.2020

**SDS No.:**

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