

# Magnesium Sulphate Anhydrous

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**Product Code Numbers: 720, 722, 43259, 43246,  
43359, 93640**



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## 1. Identification of the substance/preparation

### Name of product

Magnesium Sulphate Anhydrous

### Recommended intended purpose

Fertilizer Miscellaneous industrial applications

## 2. Composition/Information on Ingredients

CAS-Nr.	EC-Nr. (EINECS/ELINCS)	Name	Amount	Classification, R-, S-phrases
7487-88-9	231-298-2	Magnesium sulphate	> 98%	-

### Additional advice

none

## 3. Special hazards information for man and environment

### R-phrases

Not applicable

### Special hazards information for man and environment

Not classified as a dangerous product according to the EC-directive in the latest version

## 4. First aid measures

### General information

Consult physician with continuous complaints.

### In case of inhalation

In case of inhalation ensure fresh air.

### In case of skin contact

In case of skin contact rinse off with water.

### In case of eye contact

In case of eye contact rinse thoroughly with water. .

### After swallowing

Rinse mouth with water and drink plenty of water.

## 5. Fire-fighting measures

### Suitable extinguishing material

The product is not combustible.

### Extinguishing material that may not be used for safety reasons

None

### Special exposure hazards arising from the substance, combustion products or resulting gases

In the event of fire: sulphur oxide (SO<sub>x</sub>) can be set free.

### Special protective equipment for fire-fighters

In the event of fire and/or explosion do not breathe fumes.

### Additional information

Collect contaminated fire fighting water separately, must not be discharged into the drains

## 6. Measures during unintentional release

### Personal precautionary measures

Avoid dust formation

### Environmental precautions

Do not discharge into the drains or bodies of water

### Methods for cleaning / picking up

Avoid dust formation

Pick up mechanically and send for disposal

Flush away residues with water

Disposal according to regulations

## Safety Data Sheet (91/155 EG / 2001/58/EG)

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### Additional Information

Information for safe handling look up Chapter 7.

Information for personal protective equipment look up Chapter 8.

Information for disposal look up Chapter 13.

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## 7. Handling and Storage

### Advice on safe handling

No special measures necessary if used correctly.

Take the usual precautions when handling chemicals.

### Advice on protection against fire and explosion

The product is not combustible.

No special measures necessary.

### Requirements for storage rooms and vessels

No special measures necessary.

### Advice on storage compatibility

Keep away from water.

### Further Information on storage conditions

Store in a dry place.

Product is hygroscopic

**Storage Group** 13 (German VCI-classification)

### Information on storage stability

Unlimited stability.

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## 8. Exposure controls / personal protection

### Additional advice on system design

None

### Additional advice

None

### Respiratory protection

In case of dust formation wear micro dust mask.

### Hand protection

Not required.

### Eye protection

In case of dust formation wear goggles.

### Skin protection

None

### General protective measures

None

### Hygiene measures

Do not eat or drink during work.

Brush soiled clothing.

After work wash thoroughly.

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## 9. Physical and chemical properties

Form	Colour	Odour				
crystalline	white	odourless				
<b>Data relevant for safety</b>		Value	Temperature	At	Method	Remark
<b>pH-value in delivery state</b>		9	20 °C	340 g/l		mild alkaline
<b>Melting range</b>		1120-1150 °C				
<b>Flash point</b>		not applicable				
<b>Flammable solid</b>		no				
<b>Density</b>		2,7 g/cm <sup>3</sup>	20°C	1013 hPa		
<b>Bulk density</b>		app. 1300 kg/m <sup>3</sup>				
<b>Solubility in water</b>		340 g/l	20 °C	1013 hPa		
<b>Combustion value</b>		1				
<b>Oxidizing properties</b>						
none						
<b>Explosive properties</b>						
None						
<b>Additional information</b>						
none						

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## 10. Stability and reactivity

### Conditions to avoid

Product warms up, when treated with water.

### Materials to avoid

No hazardous reactions known.

### Hazardous decomposition products

Toxic gases/vapours: sulphurous oxides (SO<sub>x</sub>)

### Thermal decomposition

> 700 °C

## 11. Toxicological information

### Acute toxicity / irritability / sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	Not determined			
LD50 acute dermal	Not determined			
LC50 acute inhalation	Not determined			
Irritability skin	no			Experiences.
Irritability eye	no			Experiences.
sensitization skin	no			Experiences.
sensitization respiratory system	no			Experiences.

### Toxicological test (Additional information)

No experimental indication of genotoxic effects.  
Substance has no mutagene activity (Ames-Test).

### Additional information

Toxicological data refer to pure product.  
Our data are not sufficient for total texture judgement.  
Follow the usual hygiene directives for handling with chemicals.

## 12. Ecological information

### Data on elimination (persistence and degradability)

	Elimination rate	Method of analysis	Method	Remark
Physicochemical degradability	not applicable			
Biological degradability	not applicable			
Degradability	not applicable			
Biological eliminability	not applicable			
Eco-toxicological effects	inorganic product, cannot be eliminated from water by biological purification process			

	Value	Species	Method	Remark
Fish	LC50 14000 mg/l (24 h)	Leuciscus idus	DIN 38412 L15	Ref. (1)
Daphnia	EC50 1700 mg/l (24 h)	Daphnia magna	DIN 38412 L11	Ref. (1)
Algae	EC50 2700 mg/l (72 h)	Scenedesmus subspicatus	DIN 38412 L34	Ref. (1)
Bacteria	EC50 84000 mg/l (30 min)	Photobacterium phosphoreum	DIN 38412 L9	Ref. (1)

### Behaviour in sewage plant

When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.

### Additional ecological information

	Value	Method	Remark
AOX			not applicable

### General information

Product is not allowed to discharge into aquatic environment.

## 13. Disposal considerations

### Waste code no.

02 01 09

### Name of waste

Agrochemical waste other than those mentioned in 02 01 08

### Recommendations for the product

In accordance with regulations for special waste, discharge of after pre-treatment, to an authorized special waste disposal site.

The product is used as fertilizer. Before landfill the agricultural utilization should be examined.

## Safety Data Sheet (91/155 EG / 2001/58/EG)

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### Recommendations for the packaging

Uncontaminated packaging may be taken for recycling.

Contaminated packaging should be emptied as far as possible and discharged like product.

### Recommended cleansing agent

No

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## 14. Transport information

### Road/Rail – ADR/RID

No hazardous material as defined by the regulations.

### Sea - IMDG

No hazardous material as defined by the regulations.

### Air IATA/CAO

No hazardous material as defined by the regulations.

## 15. Regulatory information

### Remarks for classification

No

### R-phrases

No

### S-phrases

No

### National regulations

**Decree for case of interference** not applicable

**Water hazard classification** 1 KBwS classification

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## 16. Other Information

### Training advice

no

### Recommended uses and restrictions

no

### Further Information

The information given is based on our present knowledge and is not meant to guarantee product properties. Recipients of our product must take responsibility for observing existing laws and regulations.

Refer to product information.

### Sources of key data used

Ref. (1): INNOLAB GmbH & Co. KG, Niedervellmarsche Str. 30, 34233 Fuldata, Germany, project no.: 04/926035, 1994