



SAFETY DATA SHEET

MAGNESIUM SULFATE USP

1. PRODUCT INFORMATION AND COMPANY IDENTIFICATION

Product Name: Magnesium Sulfate USP
INCI Name: Magnesium Sulphate
CAS Number: 7487-88-9
Company: Chemistry Connection
253 Sturgis Road
Conway, AR 72034
Phone: 501-470-9689

Emergency Contact: Chemtrec: 800-424-9300

2. HAZARD IDENTIFICATION

Classification according to EC regulation 1272/2008(CLP)

This substance is classified as not hazardous.

Classification according to directive 67/548/EEC

This substance is classified as not hazardous.

Label elements

Labelling(CLP)

Hazard Statements not applicable

Safety precautions not applicable

Labelling (67/548/EEC or 1999/45/EC)

R phrase(s): not applicable

S phrase(s): not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

INCI NAME	CAS NO.	CONCENTRATION (%)
Magnesium Sulphate, Magnesium Sulfate n-hydrate	7487-88-9, 14168-73-1	≥ 99%

4. FIRST AID MEASURES

Description of first aid measures

After inhalation:	Provide fresh air.
In case of skin contact:	Change contaminated clothing. Remove residues with water.
After eye contact:	With eyelids open, wash out eyes for several minutes under flowing water.
After swallowing:	Rinse mouth and drink large quantities of water. Seek medical aid in case of troubles.

Most important symptoms and effects, both acute and delayed

No data available

Indication of any immediate medical attention and special treatment needed

No special measures are required.

5. FIRE FIGHTING MEASURES

Suitable

Extinguishing media Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

Special hazards arising from the substance or mixture

Fires in the immediate vicinity may cause the development of dangerous vapours. In case of fire may be liberated: sulphur oxides.

Advice for firefighters

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information: Hazchem-Code: - Suppress gases/vapours/mists with water spray jet. Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with the substance. Avoid generation of dust. Do not breathe dust.

Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

Methods and material for containment and cleaning up

Collect dry and place in appropriate containers for disposal, cleaning.

Reference to other sections

Not required

7. HANDLING AND STORAGE

Precautions for safe handling

Safe Handling Avoid contact with the substance. Avoid generation of dust.
Do not breathe dust.
Provide adequate ventilation, and local exhaust as needed.

Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:
Keep container tightly closed and dry.
Storage class: 13 = Non-combustible solids

Specific end use(s)

No data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Additional information: Contains no substances with occupational exposure limit values.

DNEL DNEL Workers, Long Term:
Inhalative: 37,6 mg/m³.
Dermal 21,3 mg/kg/ bw/d.
DNEL Consumers, Long Term:
Inhalative: 11,1 mg/m³.
Dermal 12,8 mg/kg/ bw/d.
Oral 12,8 mg/kg/ bw/d

Exposure controls Provide adequate ventilation, and local exhaust as needed.

Occupational exposure controls

Respiratory protection: In case of dust: Particulates filter P1 according to EN 143.

Hand protection: Protective gloves according to EN 374.
Glove material: Nitrile rubber-Layer thickness: 0,11 mm.
Breakthrough time: >480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed safety glasses according to EN 166.

Body protection: Wear suitable protective clothing.

General protection: Change contaminated clothing.
Wash hands before breaks and after work.
Work place should be equipped with a shower and an eye rinsing apparatus.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	solid
Colour	colourless up to white
Odour:	odourless
Flash point / flash point range:	non-flammable
Ignition temperature	non-flammable
Vapour pressure:	low
Density:	at 20 °C: 2,66 g/cm ³
pH value:	at 25 °C, 50 g/L: approx. 7,9
Water solubility:	at 0 °C: 269 g/L
	at 20 °C: 360 g/L
	at 40 °C: 456 g/L
Thermal decomposition:	1124 °C
Molecular weight:	120,37 g/mol

10. STABILITY AND REACTIVITY

Reactivity hygroscopic

Chemical stability Product is stable under normal conditions.

Possibility of Hazardous reactions No particular hazards known.

Conditions to avoid Keep away from heat.

Incompatible materials No data available

Hazardous decomposition products Fires in the immediate vicinity may cause the development of dangerous vapours.
In case of fire may be liberated: sulphur oxides.
Thermal decomposition: 1124 °C

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: LD50 Rat, oral: > 2000 mg/kg
LD50 Rat, dermal: > 2000 mg/kg

After swallowing: Following intake of large amounts: Nausea, vomiting, diarrhea.

General remarks NOAEL dermal: 256.0 mg/kg bw/day
NOAEC inhalative: 222.0 mg/m³
NOAEL oral: 256.0 mg/kg bw/day

12. ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity: Algae toxicity:
IC50 *Desmodesmus subspicatus*: 2700 mg/L/72h.
Bacterial toxicity:
EC50 *Photobacterium phosphoreum*: 84000 mg/L/30 min.
Daphnia toxicity:
EC50 *Daphnia magna*: 1700 mg/L/24h.
Fish toxicity:
LC50 *Gambusia affinis*: 15500 mg/L/96h.
Source: IUCLID.

Water Hazard Class: 1 = slightly hazardous to water (WGK catalog number 366)

Persistence and degradability

Further details: Methods for the determination of biodegradability are not applicable to inorganic substances.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

No data available

Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Waste key number 06 03 14 = Wastes from the MFSU of salts and their solutions and metallic oxides.

Recommendation: Dispose of waste according to applicable legislation.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.
Non-contaminated packages may be recycled.

14. TRANSPORT INFORMATION

UN number	not applicable
UN proper Shipping name	ADR/RID, IMDG, IATA: Not restricted
Transport hazard class	not applicable
Packing group	not applicable
Environmental hazards	Marine Pollutant unknown
Special precautions	No dangerous good in sense of these transport regulations.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No data available
US DOT	Not regulated

15. REGULATORY INFORMATION

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

National regulations - Great Britain

Hazchem-Code: -

National regulations - Germany

Storage class: 13 = Non-combustible solids

Water Hazard Class: 1 = slightly hazardous to water (WGK catalog number 366)

National regulations - USA

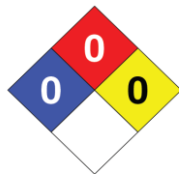
TSCA Inventory: listed
TSCA HPVC: Not listed

NFPA Hazard Rating:

Health: 0

Fire: 0

Reactivity: 0



HMIS Version III Rating:

Health: 0

Flammability: 0

Physical Hazard: 0

Personal Protection: X =

Consult your supervisor

HEALTH	<input type="checkbox"/>	0
FLAMMABILITY	<input type="checkbox"/>	0
PHYSICAL HAZARD	<input type="checkbox"/>	0
		X

16. OTHER INFORMATION

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