

# SAFETY DATA SHEET

## MAGNESIUM SULFATE USP

### 1. PRODUCT INFORMATION AND COMPANY IDENTIFICATION

Product Name: Magnesium Sulfate USP

Company: Kraft Chemical Company  
750 Oakwood Road  
Lake Zurich, IL 60047  
Phone: 708-345-5200

Emergency Contact: Infotrac: 800-535-5053

### 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	10034-99-8	≥ 99

### 4. FIRST AID MEASURES

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### 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.

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**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/m<sup>3</sup>.

Dermal 21,3 mg/kg/ bw/d.

DNEL Consumers, Long Term:

Inhalative: 11,1 mg/m<sup>3</sup>.

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.

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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 <sup>3</sup>
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

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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

<b>Acute toxicity:</b>	LD50 Rat, oral: > 2000 mg/kg LD50 Rat, dermal: > 2000 mg/kg
<b>After swallowing:</b>	Following intake of large amounts: Nausea, vomiting, diarrhea.
<b>General remarks:</b>	NOAEL dermal: 256.0 mg/kg bw/day NOAEC inhalative: 222.0 mg/m <sup>3</sup> 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.
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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

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**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: -

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**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

**16. OTHER INFORMATION**

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