

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : **Magnesium chloride**  
Product Number : M8266  
Brand : Sigma  
Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA  
Telephone : +1 800-325-5832  
Fax : +1 800-325-5052  
Emergency Phone # : (314) 776-6555

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : MgCl<sub>2</sub>  
Molecular Weight : 95.22 g/mol

CAS-No.	EC-No.	Index-No.	Concentration [%]
<b>Magnesium chloride</b>			
7786-30-3	232-094-6	-	-

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

##### OSHA Hazards

No OSHA Hazards

##### Target Organs

Central nervous system, Kidney, Gastrointestinal tract

#### HMIS Classification

Health Hazard: 1

Chronic Health Hazard: \*

Flammability: 0

Physical hazards: 1

#### NFPA Rating

Health Hazard: 1

Fire : 0

Reactivity Hazard: 0

#### Potential Health Effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

**Ingestion**

May be harmful if swallowed.

**4. FIRST AID MEASURES****If inhaled**

If breathed in, move person into fresh air. If not breathing give artificial respiration

**In case of skin contact**

Wash off with soap and plenty of water.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Further information**

The product itself does not burn.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions**

Avoid dust formation.

**Environmental precautions**

Do not let product enter drains.

**Methods for cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE****Handling**

Provide appropriate exhaust ventilation at places where dust is formed.

**Storage**

Keep container tightly closed in a dry and well-ventilated place.

Store under inert gas. hygroscopic

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Contains no substances with occupational exposure limit values.

**Personal protective equipment****Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

For prolonged or repeated contact use protective gloves.

**Eye protection**

Safety glasses

**Hygiene measures**

General industrial hygiene practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form	solid
Colour	white
Odour	odourless

**Safety data**

pH	no data available
Melting point	714.0 °C (1,317.2 °F)
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Density	2.32 g/cm <sup>3</sup>
Water solubility	soluble

**10. STABILITY AND REACTIVITY****Storage stability**

Stable under recommended storage conditions.

**Conditions to avoid**

When mixed with limited amount of water enough heat may be generated to cause frothing. Exposure to moisture.

**Materials to avoid**

Strong oxidizing agents

**Hazardous decomposition products****Hazardous decomposition products formed under fire conditions.**

Hydrogen chloride gas, Magnesium oxide

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

LD50 Oral - rat - 2,800 mg/kg

Remarks: Behavioral:Convulsions or effect on seizure threshold. Cardiac:Other changes. Lungs, Thorax, or Respiration:Other changes.

**Irritation and corrosion**

Skin - rabbit - No skin irritation

Eyes - rabbit - No eye irritation

**Sensitisation**

no data available

**Chronic exposure**

no data available

### Signs and Symptoms of Exposure

Central nervous system depression, Vomiting, Diarrhoea, Abdominal pain, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### Potential Health Effects

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Target Organs</b>	Central nervous system, Kidney, Gastrointestinal tract,

## 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

no data available

### Ecotoxicity effects

Toxicity to fish	LC50 - Leuciscus idus (Golden orfe) - 7,700.00 mg/l - 48 h LC50 - other fish - 480 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates.	EC50 - Daphnia magna (Water flea) - 3,190.00 mg/l - 24 h Immobilization EC50 - Daphnia magna (Water flea) - 140 mg/l - 48 h
Toxicity to algae	EC50 - Scenedesmus subspicatus - 2,200.00 mg/l - 72 h

### Further information on ecology

no data available

## 13. DISPOSAL CONSIDERATIONS

### Product

Observe all federal, state, and local environmental regulations.

### Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### DOT (US)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

## 15. REGULATORY INFORMATION

### OSHA Hazards

No OSHA Hazards

### TSCA Status

On TSCA Inventory

**DSL Status**

All components of this product are on the Canadian DSL list.

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

No SARA Hazards

**Massachusetts Right To Know Components**

No Components Listed

**Pennsylvania Right To Know Components**

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7786-30-3

Revision Date

**New Jersey Right To Know Components**

Magnesium chloride

CAS-No.  
7786-30-3

Revision Date

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

**16. OTHER INFORMATION****Further information**

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