# SIGMA-ALDRICH

# **Material Safety Data Sheet**

Version 3.0 Revision Date 07/14/2007 Print Date 08/06/2010

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Magnesium chloride hexahydrate

Product Number : M2670

Brand : Sigma-Aldrich

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +18003255832 Fax : +18003255052 Emergency Phone # : (314) 776-6555

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : MgCl2·6H2O Molecular Weight : 203.31 g/mol

CAS-No.	EC-No.	Index-No.	Concentration [%]
Magnesium chloride hexahydrate			
7791-18-6	232-094-6	-	-

## 3. HAZARDS IDENTIFICATION

# **Emergency Overview**

**OSHA Hazards** 

Delayed target organ effects

**Target Organs** 

Central nervous system, Kidney, Gastrointestinal tract

**HMIS Classification** 

Health Hazard: 0

Chronic Health Hazard: \*

Flammability: 0 Physical hazards: 0

**NFPA Rating** 

Health Hazard: 0

Fire: 0

Reactivity Hazard: 0

# Potential Health Effects

InhalationSkinMay be harmful if inhaled. May cause respiratory tract irritation.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

## Flammable properties

Flash point no data available Ignition temperature no data available

## 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.

Moisture sensitive. 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

Handle with gloves.

# Eye protection

Safety glasses

# Hygiene measures

General industrial hygiene practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### **Appearance**

Form solid

Colour no data available

Safety data

pΗ no data available Melting point no data available **Boiling point** no data available Flash point no data available no data available Ignition temperature Lower explosion limit no data available Upper explosion limit no data available 1.570 g/cm3 Density Water solubility no data available

#### 10. STABILITY AND REACTIVITY

## Storage stability

Stable under recommended storage conditions.

#### Conditions to avoid

Exposure to moisture may affect product quality.

## 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 - 8,100 mg/kg

## Irritation and corrosion

no data available

## Sensitisation

no data available

# **Chronic exposure**

no data available

## Signs and Symptoms of Exposure

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

#### **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.

Target Organs Central nervous system, Kidney, Gastrointestinal tract,

## 12. ECOLOGICAL INFORMATION

# Elimination information (persistence and degradability)

no data available

#### **Ecotoxicity effects**

no data available

## Further information on ecology

no data available

### 13. DISPOSAL CONSIDERATIONS

#### **Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

## 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**

Delayed target organ effects

#### **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

Chronic Health Hazard

## **Massachusetts Right To Know Components**

No Components Listed

## Pennsylvania Right To Know Components

CAS-No. Magnesium chloride hexahydrate

7791-18-6

**Revision Date** 

**New Jersey Right To Know Components** 

CAS-No.

**Revision Date** 

Magnesium chloride hexahydrate

7791-18-6

## 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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