



# Material Safety Data Sheet

Catalog Number: 191421  
Revision date: 24-Apr-2006

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY INFORMATION

Catalog Number: 191421

Product name: MAGNESIUM CHLORIDE HEXAHYDRATE ACS REAGENT GRADE

**Supplier:**

MP Biomedicals, LLC  
29525 Fountain Parkway  
Solon, OH 44139  
tel: 440-337-1200

Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %	ACGIH Exposure Limits:	OSHA Exposure Limits:
MAGNESIUM CHLORIDE HEXAHYDRATE	7791-18-6	90 - 100%	None	None

## 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** May cause skin irritation and/or dermatitis

**Principle routes of exposure:** Skin

**Inhalation:** May cause irritation of respiratory tract

**Ingestion:** May be harmful if swallowed.

**Skin contact:** May cause allergic skin reaction

**Eye contact:** Avoid contact with eyes

**Statements of hazard** MAY CAUSE ALLERGIC SKIN REACTION.

**Statement of Spill or Leak - ANSI Label** Eliminate all ignition sources. Absorb and/or contain spill with inert materials (e.g., sand, vermiculite). Then place in appropriate container. For large spills, use water spray to disperse vapors, flush spill area. Prevent runoff from entering waterways or sewers.

**Precautions - ANSI Label** Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not breathe dust

## 4. FIRST AID MEASURES

**General advice:** In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Inhalation:** Move to fresh air. Call a physician immediately.

**Skin contact:** Rinse immediately with plenty of water and seek medical advice

**Ingestion:** Do not induce vomiting without medical advice.

**Eye contact:** In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Protection of first-aiders:** No information available

Medical conditions aggravated by exposure: None known

## 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:**

**Specific hazards:**

Use dry chemical, CO<sub>2</sub>, water spray or `alcohol` foam.

Fine powder, thin sheets, chips and turnings may ignite and burn with intense heat and a brilliant white flame. Powders may form explosive mixtures with air that may be ignited by a spark.

**Unusual hazards:**

None known

**Special protective equipment for firefighters:**

Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire and/or explosion do not breathe fumes.

**Specific methods:**

Water mist may be used to cool closed containers.

**Flash point:**

Not determined

**Autoignition temperature:**

Not determined

**NFPA rating:**

NFPA Health: 0

NFPA Flammability: 0

NFPA Reactivity: 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Use personal protective equipment.

**Environmental precautions:**

Prevent product from entering drains.

**Methods for cleaning up:**

Sweep up and shovel into suitable containers for disposal.

## 7. HANDLING AND STORAGE

**Storage:**

ROOM TEMPERATURE

**Handling:**

Use only in area provided with appropriate exhaust ventilation.

**Safe handling advice:**

Wear personal protective equipment. Remove and wash contaminated clothing before reuse.

**Technical measures/storage conditions:**

Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition

**Incompatible products:**

Oxidising and spontaneously flammable products

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures:** Ensure adequate ventilation, especially in confined areas.

### PERSONAL PROTECTIVE EQUIPMENT

**Respiratory protection:** Breathing apparatus only if aerosol or dust is formed.

**Hand protection:** Pvc or other plastic material gloves

**Skin and body protection:** Impervious clothing Long sleeved clothing

**Eye protection:** Safety glasses with side-shields

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Formula:	MgCl <sub>2</sub> • 6H <sub>2</sub> O
Molecular weight:	203.3
Melting point/range:	118°C
Boiling point/range:	No Data available at this time.
Density:	2.316-2.33 g/cm <sup>3</sup>
Vapor pressure:	No data available
Evaporation rate:	No data available
Vapor density:	No data available
Solubility (in water):	Soluble
Flash point:	Not determined
Autoignition temperature:	Not determined

## 10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Polymerization:	None under normal processing.
Hazardous decomposition products:	Hydrogen chloride gas
Materials to avoid:	Strong oxidising agents
Attacks steel in the presence of moisture.	
Conditions to avoid:	Exposure to air or moisture over prolonged periods.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

#### Acute toxicity

##### Components

MAGNESIUM CHLORIDE  
HEXAHYDRATE

#### RTECS Number:

OM2975000

#### Selected LD50s and LC50s

Oral LD50 Rat : 8100 mg/kg  
Oral LD50 Mouse : 7600 mg/kg

Chronic toxicity:	Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.
Local effects:	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Specific effects:	May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.
Primary irritation:	No data is available on the product itself.
Carcinogenic effects:	No data is available on the product itself.
Mutagenic effects:	No data is available on the product itself.
Reproductive toxicity:	No data is available on the product itself.

## 12. ECOLOGICAL INFORMATION

Mobility:	No data available
Bioaccumulation:	No data available
Ecotoxicity effects:	No data available
Aquatic toxicity:	May cause long-term adverse effects in the aquatic environment.

#### Components

MAGNESIUM CHLORIDE  
HEXAHYDRATE

U.S. DOT - Appendix B -  
Marine Pollutan  
Not Listed

U.S. DOT - Appendix B -  
Severe Marine Pollutants  
Not Listed

United Kingdom - The Red  
List:  
Not Listed

<b>Components</b>	<b>Germany VCI (WGK)</b>	<b>World Health Organization (WHO) - Drinking Water</b>	<b>Ecotoxicity - Fish Species Data</b>
MAGNESIUM CHLORIDE HEXAHYDRATE	Not Listed	Not Listed	Not Listed
<b>Components</b>	<b>Ecotoxicity - Freshwater Algae Data</b>	<b>Ecotoxicity - Microtox Data</b>	<b>Ecotoxicity - Water Flea Data</b>
MAGNESIUM CHLORIDE HEXAHYDRATE	Not Listed	Not Listed	Not Listed
<b>Components</b>	<b>EPA - ATSDR Priority List</b>	<b>EPA - HPV Challenge Program Chemical List</b>	<b>California - Priority Toxic Pollutants</b>
MAGNESIUM CHLORIDE HEXAHYDRATE	Not Listed	Not Listed	Not Listed
<b>Components</b>	<b>California - Priority Toxic Pollutants</b>	<b>California - Priority Toxic Pollutants</b>	
MAGNESIUM CHLORIDE HEXAHYDRATE	Not Listed	Not Listed	

### 13. DISPOSAL CONSIDERATIONS

#### Waste from residues / unused products:

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

#### Contaminated packaging:

Do not re-use empty containers

### 14. TRANSPORT INFORMATION

#### UN/Id No:

Not regulated

#### DOT:

#### Proper shipping name:

Not Regulated

#### Components

MAGNESIUM CHLORIDE  
HEXAHYDRATE

#### U.S. DOT - Appendix A Table 1 - Reportable Quantities

Not Listed

#### TDG (Canada):

#### WHMIS hazard class:

Non-controlled : :

#### IMDG/IMO

#### IMDG - Hazard Classifications

Not Applicable

#### Components

MAGNESIUM CHLORIDE  
HEXAHYDRATE

#### U.S. DOT - Appendix B - Marine Pollutan

Not Listed

#### U.S. DOT - Appendix B - Severe Marine Pollutants

Not Listed

## IMO-labels:

## 15. REGULATORY INFORMATION

## International Inventories

## Components

MAGNESIUM CHLORIDE HEXAHYDRATE

Inventory - United States TSCA - Sect. 8(b)

Present

Canada DSL Inventory List -

Present

Australia (AICS):

Present

Inventory - China:

Present

EU EINECS List -

232-094-6

Inventory - Japan:

1-233

Korean KECL:

KE-22673

Philippines PICCS:

Present

## U.S. regulations:

## Components

MAGNESIUM CHLORIDE  
HEXAHYDRATE

California Proposition 65

-  
Not Listed

Massachusetts Right to

Know List:  
[present]

New Jersey Right to

Know List:  
sn 1136

Pennsylvania Right to Know

List:  
[present]

## Components

MAGNESIUM CHLORIDE  
HEXAHYDRATE

Florida substance List:

[present]

Rhode Island Right to

Know List:  
Flammable

Illinois - Toxic Air

Contaminants  
Not Listed

Connecticut - Hazardous Air

Pollutants  
Not Listed

## Components

MAGNESIUM CHLORIDE  
HEXAHYDRATESARA 313 Emission  
reporting/Toxic Release  
of Chemicals

Not Listed

CERCLA/SARA - Section NTP:  
302 Extremely Haz

Not Listed

None

IARC:

None

## SARA 313 Notification:

The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

## State Notification:

The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

## 16. OTHER INFORMATION

Prepared by: Health &amp; Safety

**Disclaimer:** The information and recommendations contained herein are based upon tests believed to be reliable. However, MP Biomedicals does not guarantee the accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage maybe required. MP Biomedicals assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.

**End of Safety Data Sheet**