

## SECTION 1 - Chemical Product & Company Identification

Product Name 5.0 M Magnesium chloride hexahydrate

Product Number HR2-803

Company Hampton Research

Street Address 34 Journey

City, State, Zip, Country Aliso Viejo, CA 92656-3317 USA

Technical Phone 949 425 1321

Fax 949 425 1611

Emergency Phone 949 425 1321

For **CHEMTREC** Assistance, call: 800 424 9300

For International **CHEMTREC** Assistance, call: 703 527 3887

## SECTION 2 - Composition / Information on Ingredient

Substance Name	Synonym	Formula	MW	CAS #	EC #
Magnesium chloride hexahydrate	N/A	MgCl <sub>2</sub> • 2H <sub>2</sub> O	203.30	7791-18-6	2320946

RTECS	Merck	Beilstein	SARA
OM2975000	N/A	N/A	No

## SECTION 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

## (CONTINUED) SECTION 3 - Hazards Identification

### NFPA RATING

HEALTH HAZARD: 0

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.

For additional information on toxicity, please refer to **SECTION 11**.

## SECTION 4 - First Aid Measures

### GENERAL ADVICE

- Consult a physician.
- Show this safety data sheet to the doctor in attendance.

### ORAL EXPOSURE

- Do NOT induce vomiting. Never give anything by mouth to an unconscious person.
- Rinse mouth with water.
- Consult a physician.

### INHALATION EXPOSURE

- If inhaled, remove to fresh air. If not breathing give artificial respiration.
- If breathing is difficult, GIVE OXYGEN.
- Consult a physician.

### DERMAL EXPOSURE

- Take off contaminated clothing and shoes immediately.
- Wash off with soap and plenty of water.
- Consult a physician.

### EYE EXPOSURE

- In case of contact with eyes, flush with copious amounts of water for at least 15 minutes.
- Assure adequate flushing by separating the eyelids with fingers.
- Consult a physician.

## SECTION 5 - Fire Fighting Measures

### FLASH POINT

- N/A

### AUTOIGNITION TEMPERATURE

- N/A

### EXTINGUISHING MEDIA

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

### FIREFIGHTING

- Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes for fire fighting if necessary.

### FURTHER INFORMATION

- The product itself does not burn.

## SECTION 6 - Accidental Release Measures

### PROCEDURE(S) OF PERSONAL PRECAUTIONS

- Use personal protective equipment.
- Avoid dust formation.
- Ensure adequate ventilation.

### ENVIRONMENTAL PRECAUTIONS

- Do not let product enter drains.

### METHODS FOR CLEANING UP

- Pick up and arrange disposal without creating dust. Sweep up and shovel.
- Keep in suitable, closed containers for disposal.
- Ventilate area and wash spill site after material pickup is complete.

## SECTION 7 - Handling & Storage

### HANDLING

- User Exposure
  - Avoid formation of dust and aerosols.
  - Provide appropriate exhaust ventilation at places where dust is formed.
  - Normal measures for preventative fire protection.

### STORAGE

- Suitable - Keep container tightly closed in a dry and well-ventilated place.
  - Moisture sensitive. Hygroscopic

## SECTION 8 - Exposure Controls / PPE

### ENGINEERING CONTROLS

- Contains no substances with occupational exposure limit values.

### PERSONAL PROTECTIVE EQUIPMENT

- Respiratory: Respiratory protection is not required. Where protection from nuisance levels of dust 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: Handle with gloves.
- Eye: Safety glasses

### GENERAL HYGIENE MEASURES

- Handle in accordance with good industrial hygiene and safety practice.
- Wash thoroughly after handling.

## SECTION 9 - Physical / Chemical Properties

### APPEARANCE

### COLOR:

Colorless

### FORM:

Solid

### PROPERTY

### VALUE

### AT TEMPERATURE OR PRESSURE

Molecular Weight	N/A
pH	N/A
BP / BP Range	N/A
MP / MP Range	N/A
Flash Point	N/A
Ignition Temperature	N/A
Lower Explosion Limit	N/A
Upper Explosion Limit	N/A
Vapor Pressure	N/A
Density	1.570 g/cm <sup>3</sup>
Water Solubility	Soluble

**N/A = NOT AVAILABLE**

## SECTION 10 - Stability & Reactivity

### STABILITY

- Stable under recommended storage conditions.

## (CONTINUED) SECTION 10 - Stability & Reactivity

### MATERIAL TO AVOID

- Materials to Avoid: Strong oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

- Formed under Fire Conditions: - Hydrogen chloride gas, Magnesium oxide

### HAZARDOUS POLYMERIZATION

- N/A

## SECTION 11 - Toxicological Information

### ACUTE TOXICITY

- LD50 Oral - rat - 8,100 mg/kg

### IRRITATION AND CORROSION

- N/A

### SENSATION

- N/A

### CHRONIC EXPOSURE

- N/A

### SIGNS & 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.

## SECTION 12 - Ecological Information

### ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)

- N/A

### ECOTOXICITY EFFECTS

- N/A

## **(CONTINUED) SECTION 12 - Ecological Information**

### **FURTHER INFORMATION ON ECOLOGY**

- No data available.

## **SECTION 13 - Disposal Considerations**

### **APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION**

- Contact a licensed professional waste disposal service to dispose of this material.
- Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an after burner and a scrubber.
- Observe all federal, state, and local environmental regulations.

### **CONTAMINATED PACKAGING**

- Dispose of as unused product.

## **SECTION 14 - Transportation Information**

### **DOT (US)**

- Not dangerous goods.

### **IMDG**

- Not dangerous goods.

### **IATA**

- Not dangerous goods.

## **SECTION 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.

## (CONTINUED) SECTION 15 - Regulatory Information

### 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

- Magnesium chloride hexahydrate: CAS-No: 7791-18-6 Revision Date:

### NEW JERSEY RIGHT TO KNOW COMPONENTS

- Magnesium chloride hexahydrate: CAS-No: 7791-18-6 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.

## SECTION 16 - Other Information

### DISCLAIMER

- For R&D use only. Not for drug, household, or other use.

### WARRANTY

- The above information is believed to be correct but does no purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of this product. Hampton Research Corp., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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