

## Material Safety Data Sheet (MSDS)

### Company Details:

**Company Name: Element Four Enterprise Pty Ltd**

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### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Magnesium Chloride Hexahydrate**

Chemical Formula:  $\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$

Common Names: Magnesium Chloride 6-Hydrate

### SECTION 2: HAZARDS IDENTIFICATION

GHS Classification:

Skin irritation (Category 2)

Eye irritation (Category 2A)

Hazard Statements:

Causes skin and eye irritation.

Precautionary Statements:

Wash hands thoroughly after handling.

Avoid contact with skin and eyes.

Wear protective gloves, protective clothing, and eye/face protection.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Magnesium Chloride Hexahydrate

CAS Number: 7791-18-6

Molecular Weight: 203.30 g/mol

Purity:  $\geq 98\%$

### SECTION 4: FIRST AID MEASURES

#### In case of Inhalation:

Move to fresh air immediately. If breathing is difficult, give oxygen. Seek medical attention.

#### In case of Skin Contact:

Rinse with water for at least 15 minutes. Remove contaminated clothing. Seek medical attention if irritation persists.

#### In case of Eye Contact:

Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present. Seek immediate medical attention.

#### In case of Ingestion:

Rinse mouth and drink plenty of water. Do NOT induce vomiting. Seek medical attention immediately.

### SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media: Use dry chemical, carbon dioxide, or sand.

Hazardous Combustion Products: Hydrogen chloride gas, magnesium oxides.

Special Precautions: Wear full protective equipment and self-contained breathing apparatus (SCBA).

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear protective equipment and avoid contact with skin, eyes, or clothing.

**Environmental Precautions:** Prevent entry into waterways, sewers, or soil.

**Cleanup Methods:** Collect spillage with inert absorbent material (e.g., sand, vermiculite) and place in a sealed container for disposal.

## **SECTION 7: HANDLING AND STORAGE**

### **Handling:**

Avoid contact with skin, eyes, and clothing. Use in a well-ventilated area. Do not breathe dust.

### **Storage:**

Store in a cool, dry, well-ventilated area. Keep container tightly closed. Store away from acids and moisture.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

Components with workplace control parameters

### **8.2 Exposure controls**

Appropriate engineering controls

General industrial hygiene practice.

### **Personal protective equipment**

#### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

#### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **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).

#### **Control of environmental exposure**

Do not let product enter drains.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: Colorless or white crystalline solid

Odor: Odorless

pH: Slightly acidic in solution

Melting Point: 117°C (243°F) (decomposes)

Boiling Point: Not applicable (decomposes before boiling)

Solubility: Soluble in water, ethanol, and methanol

## **SECTION 10: STABILITY AND REACTIVITY**

Chemical Stability: Stable under recommended storage conditions.

Incompatible Materials: Reacts with strong acids, strong bases, and metals (e.g., aluminum, zinc).

Hazardous Decomposition Products: Hydrogen chloride gas, magnesium oxides.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Acute Toxicity: Causes skin and eye irritation.

Chronic Effects: Prolonged exposure may cause respiratory irritation or skin sensitization.

## **SECTION 12: ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

no data available

### **12.2 Persistence and degradability**

no data available

### **12.3 Bioaccumulative potential**

no data available

### **12.4 Mobility in soil**

no data available

### **12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## **12.6 Other adverse effects**

no data available

## **SECTION 13: DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### **Contaminated packaging**

Dispose of as unused product

## **SECTION 14: TRANSPORT INFORMATION**

UN Number: Not regulated

Shipping Name: Not regulated

Hazard Class: Not regulated

Packing Group: Not regulated

## **SECTION 15: REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

no data available

### **15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

## **SECTION 16. Other Information**

### **Disclaimer for Warranties:**

The information provided in this Material Safety Data Sheet (MSDS) is based on current knowledge and is intended to describe the product for safe handling, use, and disposal. Element Four Enterprise Pty Ltd makes no warranties, expressed or implied, regarding the accuracy, completeness, or suitability of this information for any particular purpose. The user is responsible for ensuring compliance with all applicable laws and regulations. Element Four Enterprise Pty Ltd shall not be held liable for any damages resulting from the use or misuse of this product or the information contained herein.