

## 1: Identification of substance / mixture

### 1. Product Identifier

Substance

Product Name **Magnesium Chloride Hexahydrate**  
Product Code M24000  
CAS Number 7791-18-6  
Other Names M24000  
IUPAC  
MFCN Number  
EC/EINECS  
REACH Number Index-No

### 2. Relevant identified uses of the substance or mixture and uses advised against

For laboratory research use

### 3. Details of the supplier of the safety data sheet

Melford Laboratories Ltd  
Bildeston Road, Chelsworth  
Ipswich  
Suffolk  
IP77LE  
UK



Telephone: 01449 741178  
Fax: 01449 741217  
Email: support@melford.co.uk

### 4. Emergency telephone number

+44(0)1449 741178 -

## 2. Hazards Identification

### 1. Classification of the substance or mixture

Non Hazardous

### 2. Label elements

Non Hazardous

### Hazard Statements

Non Hazardous

### Precautionary Phrases

Non Hazardous

### 3. Other Hazards

Non Hazardous

## 3. Composition / Information on Ingredients

### 1. Substances

Product Name	Hazards	Concentration
Magnesium Chloride Hexahydrate		
CAS Number: 7791-18-6		<=100%

## 4. First Aid Measures

### 1. Description of first aid measures

**Skin Contact** Wash immediately with plenty of soap and water.  
Remove all contaminated clothes and footwear immediately unless stuck to skin.  
Consult a doctor.

**Eye Contact** Rinse opened eye for several minutes under running water.  
Consult a doctor.

**Ingestion** Wash out mouth with water.  
Consult a doctor.

*Inhalation* Remove casualty from exposure ensuring one's own safety whilst doing so.  
If breathing becomes bubbly, have the casualty sit and provide oxygen if available.  
Consult a doctor.

## 2. Most important symptoms and effects

No data available.

## 3. Indication of any immediate medical attention

Notes to Physician: Treat symptomatically

## 5. Firefighting measures

### 1. Extinguishing Media

*Suitable* Carbon dioxide.  
Dry chemical powder.  
Alcohol resistant foam.  
Alcohol or polymer foam.

*Unsuitable* None

### 2. Special Hazards arising from the substance or mixture

In combustion may emit toxic fumes:  
Hydrogen chloride gas, Chlorine, Magnesium oxides

### 3. Advice for Fire Fighters

Wear self-contained breathing apparatus.

## 6. Accidental Release Measures

### 1. Personal Precautions

Mark out the contaminated area with signs and prevent access to unauthorised personnel.

### 2. Environmental Precautions

Do not discharge into drains or rivers.

### 3. Methods & Materials

Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 4. Preventing the occurrence of secondary hazards.

Clean up all spills immediately. Wear suitable PPE.

## 7. Handling and Storage

### 1. Personal Precautions

*Safe Handling* Ensure there is exhaust ventilation of the area.  
*Protection against explosions and fires* Normal measures for preventive fire protection.

### 2. Conditions for safe storage, including any incompatibilities

*Managing Storage Risks* Store in cool, well ventilated area.  
Keep away from direct sunlight.

*Storage Controls* No special requirements

*Maintaining Integrity*

*Other advice* no further information available

### 3. Specific End Uses

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

## 8. Exposure Controls/Personal Protection

### 1. Control Parameters

No Data Available

### 2. Exposure Controls

*General protective and hygiene measures*

Avoid contact with skin and eyes  
 Wash hands during breaks and at the end of handling the material

*Engineering measures*

Ensure there is exhaust ventilation of the area.

*Eye / Face Protection*

Safety Glasses with side-shields.  
 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

*Hand 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.  
 The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it

*Respiratory protection*

Respiratory protective device with particle filter.  
 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).

*Skin 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.

*Other personal protection advice*

no data

## 9. Physical and Chemical Properties

### 1. Physical and Chemical Properties

Appearance	White Powder
Odour	Odourless
Odour threshold	No Data Available
PH	No Data Available
Melting point / Freezing point	118°C
Initial boiling point and boiling range	No Data Available
Flash point	No Data Available
Evaporation rate	No Data Available
Flammability(solid,gas)	No Data Available
Upper/lower flammability or explosive limits	No Data Available
Vapour pressure	No Data Available
Vapour density	No Data Available
Relative density	No Data Available
Solubility(ies):	Soluble in water
Partition coefficient: n-octanol/water	No Data Available
Auto-ignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	No Data Available
Explosive properties	No Data Available
Oxidising properties	No Data Available

### 2. Other Information

No additional information available

## 10. Stability and Reactivity

## 1. Reactivity

No data available

## 2. Stability

Stable under recommended storage conditions

## 3. Possibility of Hazardous Reactions

No data available

## 4. Conditions to Avoid

No data available

## 5. Incompatible Materials

Metals

## 6. Hazardous Decomposition Products

Hydrogen chloride gas, Chlorine, Magnesium oxides

## 11. Toxicology information

### 1. Information

<i>Acute Toxicity</i>	LD50 Oral 8100 mg/kg (Rat)
<i>Skin corrosion/irritation</i>	No data available
<i>Serious eye Damage/irritation</i>	No data available
<i>Respiratory or skin sensitisation</i>	No data available
<i>Germ Cell mutagenicity</i>	No data available
<i>Carcinogenicity</i>	No data available
<i>Reproductive toxicity</i>	No data available
<i>STOT-single exposure</i>	No data available
<i>STOT-repeated exposure</i>	No data available
<i>Aspiration hazard</i>	No data available

### 2. Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

## 12. Ecological Information

### 1. Toxicity

Freshwater Algae  
EC50: >100 mg/L - 72h (Desmodesmus subspicatus) OECD Test Guideline 201)

Freshwater Fish  
LC50: 2.12g/L - 96h (Pimephals promelas) anhydrous basis

Water Flea  
LC50: 548.4mg/L - 48h anhydrous basis

Do not discard to drains

### 2. Persistence and degradability

not known

### 3. Bio-Accumulative Potential

not known

## 4. Mobility and Soil

not known

## 5. Results of PBT & vPvB assessment

not known

## 6. Other adverse effects

not known  
Do not discard to drains

## 13. Disposal Considerations

### 1. Waste Treatment Methods

*Disposal Operations* Consult state, local or national regulations for proper disposal.

*Disposal of Packaging* Disposal must be made according to official regulations.

## 14. Transport Information

### Air (ICAO)

Not classified as hazardous for transport

### Road (ADR)

Not classified as hazardous for transport

### Sea (IMDG)

Not classified as hazardous for transport

## 15. Safety, health, environmental and national regulations

### 1. Safety, health, environmental and national regulations:

product is not subject to any additional regulations or provisions

### 2. Safety Assessment

No Chemical Safety Assessment

## 16. Other Information

### 1. Other Information:

ADR: Accord Europeen sur le transport des marchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road)

RID:Reglement International concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association

ICAO:International Civil Aviation Organization

ICAO-TI: Technical Instructions by the ICAO

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS:Chemical Abstracts Service

### 3. Disclaimer

The product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user.