

1: Identification of substance / mixture

1. Product Identifier

Mixture

Product Name **Magnesium Chloride 2M solution**
Product Code M24500
CAS Number 7791-18-6
Other Names
IUPAC
MFCD 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

H315	Skin Irrit. 2	
H319	Eye Irrit. 2	
H335	STOT SE 3	

2. Label elements

Signal Word **Warning**



Hazard Statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary Phrases

P233	Keep container tightly closed.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.

3. Other Hazards

Additional precautionary phrases are located throughout the safety data sheet

3. Composition / Information on Ingredients

2. Mixtures

Product Name	Hazards	Concentration
water		
CAS Number: 7732-18-5 EC/EINECS: 213-791-2		Q.S.
Magnesium chloride hexahydrate		
CAS Number: 7791-18-6 EC/EINECS: 232-094-6		10-50

4. First Aid Measures

1. Description of first aid measures

- Skin Contact* P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P332 + P313: If skin irritation occurs: Get medical advice/attention.
Wash immediately with plenty of soap and water.
Remove all contaminated clothes and footwear immediately unless stuck to skin.
Consult a doctor.
- Eye Contact* P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313: If eye irritation persists: Get medical advice/attention.
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

No data available

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

<i>Safe Handling</i>	Ensure there is exhaust ventilation of the area.
<i>Protection against explosions and fires</i>	P362: Take off contaminated clothing and wash before reuse. Normal measures for preventive fire protection.

2. Conditions for safe storage, including any incompatibilities

<i>Managing Storage Risks</i>	Store in cool, well ventilated area. Keep away from direct sunlight.
<i>Storage Controls</i>	No special requirements
<i>Maintaining Integrity</i>	P233: Keep container tightly closed.
<i>Other advice</i>	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

<i>General protective and hygiene measures</i>	Avoid contact with skin and eyes Wash hands during breaks and at the end of handling the material
<i>Engineering measures</i>	Ensure there is sufficient ventilation of the area.
<i>Eye / Face Protection</i>	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)
<i>Hand protection</i>	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
<i>Respiratory protection</i>	Respiratory protection not required.
<i>Skin protection</i>	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.
<i>Other personal protection advice</i>	no data

9. Physical and Chemical Properties

1. Physical and Chemical Properties

Appearance	Liquid
Odour	No Data Available
Odour threshold	No Data Available
PH	No Data Available
Melting point / Freezing point	No Data Available
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):	No Data Available
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

Strong oxidizing agents.

6. Hazardous Decomposition Products

No data available

11. Toxicology information

1. Information

Acute Toxicity LD50 Oral 8100 mg/kg (Rat)
 Data for Magnesium chloride anhydrous

Skin corrosion/irritation No data available

Serious eye Damage/irritation No data available

Respiratory or skin sensitisation No data available

Germ Cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

STOT-single exposure No data available

STOT-repeated exposure No data available

Aspiration hazard 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

Component- Magnesium chloride:

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.