



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Revision date 01-Sep-2021

Revision Number 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** Magnesium Chloride Hexahydrate Flakes

### Other means of identification

**Product Code(s)** 8677-3

**Chemical formula** MgCl<sub>2</sub>\*6H<sub>2</sub>O

### Recommended use of the chemical and restrictions on use

**Recommended use** Industrial flooring, abrasive and textile industry, water treatment, fertilizer mixtures, animal feed, oil drilling, ice and dust control

### Supplier's details

#### Manufacturer

Dead Sea Works LTD  
P.O.B. Beer Sheva 84100, Israel

### Emergency telephone number

**Emergency Telephone** Chemtrec 1-800-424-9300  
+972-8-9977577

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### GHS Label elements, including precautionary statements

This product is not classified as hazardous according to the UN GHS guideline and labeling is not required

### Other hazards which do not result in classification

Not applicable

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Substance

Chemical name	CAS No	Weight-%
Magnesium Chloride Hexahydrate	7791-18-6	Proprietary

## 4. FIRST AID MEASURES

### Description of necessary first aid measures

<b>Inhalation</b>	Remove to fresh air. If breathing difficulty or discomfort occurs and persists, seek medical attention.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
<b>Ingestion</b>	Rinse mouth thoroughly with water Get medical attention if symptoms occur NOTE: Never give an unconscious person anything to drink

**Most important symptoms/effects, acute and delayed**

**Symptoms** No information available.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Note to physicians** In case of ingestion, the salt level in blood must be determined. Treat symptomatically and supportively.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** None known.

**Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** May emit toxic fumes under fire conditions.

**Special protective actions for fire-fighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Cool containers with water spray. Contain runoff to prevent entry into water or drainage systems.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Wear protective clothing specified for normal operations (see Section 8).

**Environmental precautions**

**Environmental precautions** Avoid access to streams, lakes or ponds.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Sweep up, place in a bag and hold for waste disposal or possible reuse.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep away from incompatible materials.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

**Exposure guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	ACGIH TLV	OSHA PEL	European Union	China
Magnesium Chloride Hexahydrate 7791-18-6	-	-	-	-

**Appropriate engineering controls**

**Engineering controls** Good general ventilation.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Chemical safety goggles.

**Hand protection** Not required.

**Skin and body protection** Body covering clothes and boots.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required

**General hygiene considerations** Safety shower and eye bath should be provided.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

**Physical state** Solid  
**Appearance** flakes or pellets  
**Color** white  
**Odor** None

Property	Values	Remarks • Method
Melting point / freezing point	118 °C	
Boiling point / boiling range	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No data available	None known
Autoignition temperature	-	Not self-ignitable
Decomposition temperature	> 160 °C	
pH	8.2	(1:10)
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	Not available	

Water solubility	167g/100g	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapor pressure	Not available	
Relative density	1.6 g/cm <sup>3</sup> (20°C)	
Bulk density	800-900 kg/m <sup>3</sup>	
Liquid Density	No data available	
Vapor density	No data available	Not determined
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

**Other information**

Fire point	No information available
Oxidizing properties	No oxidising properties can be predicted on the basis of chemical structure
Explosive properties	Not explosive
Molecular weight	No information available
Liquid Density	No information available

**10. STABILITY AND REACTIVITY**

Reactivity	No reactive hazards known/expected.
Stability	Stable under normal conditions.
<b>Explosion data</b>	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heating above decomposition temperature. Exposure to moisture.
Incompatible materials	Oxidising agents.
Hazardous decomposition products	Oxides of: potassium, calcium, magnesium and HCl.

**11. TOXICOLOGICAL INFORMATION****Information on the likely routes of exposure****Product Information**

**Symptoms** No information available.

**Numerical measures of toxicity****Acute toxicity****Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Magnesium Chloride Hexahydrate	8100 mg/kg (Rat)	-	-

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Skin corrosion/irritation** Not irritant.

**Serious eye damage/eye irritation** Not irritant.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	IARC	ACGIH	NTP
Magnesium Chloride Hexahydrate	-	-	-

**Reproductive toxicity** No adverse effect were observed on fertility and/or on the development.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No effects on specific target organs have been identified.

**Aspiration hazard** Not expected.

## 12. ECOLOGICAL INFORMATION

### Toxicity

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

**Note** MgCl<sub>2</sub> is a seawater component

### Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea	Toxicity to microorganisms
Magnesium Chloride Hexahydrate	-	-	-	-

### Persistence and degradability

Not relevant for inorganic salts.

### Bioaccumulative potential

Not expected to bioaccumulate.

Chemical name	Partition coefficient
Magnesium Chloride Hexahydrate	-

### Mobility

Expected to be mobile because of high solubility.

### Other adverse effects

No information available.

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Dispose of in a safe manner in accordance with local/national regulations. Containers can

be recycled after proper cleaning.

## 14. TRANSPORT INFORMATION

### IMDG

UN number or ID number	Not regulated
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Marine pollutant	Not applicable
Special precautions	None
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

### ADR/RID/ADN

UN number or ID number	Not regulated
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Environmental hazards	Not applicable
Special precautions	None
Classification code	No information available

### IATA

UN number or ID number	Not regulated
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Environmental hazards	Not applicable
Special precautions	None

### DOT

UN/ID no	Not regulated
Marine pollutant	No.

## 15. REGULATORY INFORMATION

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

#### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

#### International Inventories

GHS hazardous component CAS registry numbers appearing in section 3 may differ from substances appearing in section 15 due to country or regional chemical inventory coverage requirements, however, remain in compliance with the inventory. Products that are used as food additives are exempt from listing in international chemical inventories.

For further details on the regulatory status for this product in a specific country, please send your inquiry to the following email address: [msdsinfo@icl-group.com](mailto:msdsinfo@icl-group.com)

TSCA	Listed or exempted
DSL	Listed or exempted

ENCS	Listed or exempted
IECSC	Listed or exempted
KECL	Listed or exempted
PICCS	Listed or exempted
AIIC	Listed or exempted
NZIoC	Listed or exempted
TCSI	Listed or exempted
NCI	Listed or exempted
TECI	Listed or exempted
NSQ	Listed or exempted

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AIIC - Australian Inventory of Industrial Chemicals  
 NZIoC - New Zealand Inventory of Chemicals  
 TCSI - Taiwan Chemical Substance Inventory  
 NCI - Vietnam National Chemicals Inventory  
 TECI - Thailand Inventory FDA Existing Chemicals  
 NSQ - Mexico National Inventory of Chemical Substances

## 16. OTHER INFORMATION

Revision date 01-Sep-2021

Revision Note The symbol (\*\*\*) in the margin of this SDS indicates that this line has been revised.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

Prepared By HERA

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End of Safety Data Sheet