

## MATERIAL SAFETY DATA SHEET

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Product name	<b>Magnesium Chloride Hexahydrate Crystals</b>	
Product id	8677-F	
Revision date	04/07/2011	Revision: 3
Supersedes	08/09/2009	

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### 1. Identification of the substance & the company

Trade name	Magnesium Chloride Hexahydrate Crystals
Chemical formula	Not applicable
Type of product and use	Industrial flooring, abrasive and textile industry, water treatment, fertilizer mixtures, animal feed, oil drilling, Ice and dust control
Company	Golzar Negin Yazd Co. NO.16- Azadegan Blvd. - Yazd Tel: +98-35-37223555 Fax: +98-35-35213330

Emergency telephone number: 98-35-37223555

### 2. Hazards identification

**Adverse human health effects** May irritate eyes  
Not classified as dangerous

### 3. Composition / information on ingredients

Components	Weight %	Index No.	EC No.	EU Classification
Magnesium Chloride Hexahydrate 7791-18-6	46.5-47		2320946 (anhydrous CAS 7786-30-3)	None
Calcium Chloride 10043-52-4	2.2	017-013-00-2	233-140-8	Xi;R36
Sodium Chloride 7647-14-5	0.9		231-598-3	None
Potassium Chloride 7447-40-7	0.6		231-211-8	None
Water of crystallization 7732-18-5	49.3-49.8		231-791-2	None

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**4. First-aid measures**

<b>Eye contact</b>	Holding the eyelids apart, flush eyes promptly with copious flowing water for at least 20 minutes. Get medical attention if irritation persists.
<b>Skin contact</b>	Wash with water in case of irritation. Get medical attention if irritation occurs and persists.
<b>Inhalation</b>	In case of dust inhalation or breathing fumes released from heated material, remove person to fresh air. Keep him quiet and warm. Apply artificial respiration if necessary and get medical attention immediately.
<b>Ingestion</b>	If swallowed, wash mouth thoroughly with plenty of water. Get medical attention immediately. ***** NOTE: Never give an unconscious person anything to drink. *****
<b>Notes to the physician</b>	In case of ingestion, the salt level in blood must be determined. Treat symptomatically and supportively.

**5. Fire - fighting measures**

<b>Fire fighting procedure</b>	In closed stores, provide fire-fighters with self-contained breathing apparatus in positive pressure mode
<b>Unusual fire and explosion hazards</b>	When heated to decomposition, may release poisonous and corrosive fumes of HCl

**6. Accidental release measures**

<b>Personal precautions</b>	Wear protective clothing specified for normal operations (see section 8).
<b>Methods for cleaning up</b>	Sweep up, place in a bag and hold for waste disposal or possible re-use

**7. Handling and storage**

<b>Handling</b>	Keep containers tightly closed.
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**Storage** Keep in a dry, well-ventilated place away from incompatible materials (see "materials to avoid").

### 8. Exposure controls / personal protection

#### Exposure Limits :

Components	ACGIH-TLV Data	OSHA (PEL) Data
Magnesium Chloride Hexahydrate 7791-18-6	Not determined	Not determined
Calcium Chloride 10043-52-4	Not determined	Not determined
Sodium Chloride 7647-14-5	Not determined	Not determined
Potassium Chloride 7447-40-7	Not determined	Not determined
Water of crystallization 7732-18-5	Not determined	Not determined

#### Ventilation requirements

Good general ventilation.  
Ventilation must be sufficient to maintain TLV-TWA below 3 mg/m<sup>3</sup>, respirable particles, and 10 mg/m<sup>3</sup>, inhalable particles (ACGIH recommendation for Particles (Insoluble or poorly soluble) Not Otherwise Specified (PNOS)).

#### Personal protective equipment:

- **Respiratory protection** In case of significant or accidental dust emissions, dust mask should be worn
- **Hand protection** Protective gloves
- **Eye protection** Chemical safety goggles
- **Skin and body protection** Body covering clothes and boots

#### Hygiene measures

Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking.  
Safety shower and eye bath should be provided.

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**9. Physical and chemical properties**

<b>Appearance</b>	White crystals
<b>Boiling point/range</b>	Not applicable.
<b>Melting point/range</b>	118 C (244 F)
<b>Flash Point</b>	Non-combustible
<b>Auto-ignition temperature</b>	Not applicable
<b>Vapour pressure</b>	Not available
<b>Solubility:</b>	
<b>-solubility in water</b>	167g/100g
<b>Bulk density</b>	800-900 Kg/m <sup>3</sup>
<b>Density</b>	1.6 g/cm <sup>3</sup> (20 C)
<b>PH</b>	4.8 @ 10% aqueous solution
<b>Decomposition temperature</b>	>160 C

**10. Stability and reactivity**

<b>Stability</b>	Stable under normal conditions.
<b>Materials to avoid</b>	Oxidizing agents
<b>Conditions to avoid</b>	Exposure to moisture Heating above decomposition temperature
<b>Hazardous decomposition products</b>	Oxides of: potassium, calcium, magnesium, sodium and HCL
<b>Hazardous polymerization</b>	Will not occur

**11. Toxicological information**

<b>Acute toxicity:</b>	
<b>-Rat oral LD50</b>	8100 mg/kg (for MgCl <sub>2</sub> )
<b>-Mouse oral LD50</b>	7600 mg/kg (for MgCl <sub>2</sub> )
<b>Mutagenicity</b>	Not available
<b>Carcinogenicity</b>	Not classified by IARC Not included in NTP 11 <sup>th</sup> Report on Carcinogens

**12. Ecological information**

<b>Information on ecological effects</b>	MgCl <sub>2</sub> is a seawater component
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### 13. Disposal considerations

<b>Waste disposal</b>	Observe all federal, state and local environmental regulations when disposing of this material.
<b>Disposal of Packaging</b>	Containers can be recycled after proper cleaning.

### 14. Transportation information

<b>IMO</b>	Not regulated
<b>ICAO/IATA</b>	Not regulated
<b>DOT</b>	Not regulated

### 15. Regulatory information

<b>EU</b>	Anhydrous MgCl <sub>2</sub> is reported EINECS
<b>-Indication of danger</b>	Not subject to labelling in accordance with EEC Directives.
<b>USA</b>	Reported in the EPA TSCA Inventory.
<b>Australia</b>	Listed in AICS
<b>Canada</b>	Listed in DSL
<b>China inventory</b>	Listed
<b>Japan</b>	Listed in ENCS
<b>New Zealand Inventory</b>	Listed in NZIoC
<b>Philippines</b>	Listed in PICCS

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**16. Other information**

**This data sheet contains changes from the previous in section(s)**

**3. 15**

The information here in is based on the present state of our knowledge. It is believed to be correct but is not necessarily All- inclusive and shall be used only as a guide.

Golzar Negin Yazd Co. shall not be held liable for any damage resulting from handling or from contact with the above product. For further information, contact Golzar Negin Yazd Co.

**End of safety data sheet**