

# DEAD SEA WORKS LTD

## MATERIAL SAFETY DATA SHEET

Product name **MAG Flakes**  
Product id 8677-FL  
Revision date 04/07/2011 Revision: 3  
Supersedes 08/09/2009

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

Trade name MAG Flakes  
Chemical formula Not applicable  
Type of product and use Ice and dust control  
Company Dead Sea Work Ltd  
P.O.B. 75 Beer Sheva 84100, Israel  
Tel: +972-8-6465347  
Fax: +972-8-6280533  
www.dsosalts.com

Emergency telephone number: 972-8-9977577

### 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		2320946 (anhydrous CAS 7786-30-3)	None
Other Salts	3-5	Not Listed	Not Listed	None
Water of crystallization 7732-18-5	48.5-50.5		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
Other Salts	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

Appearance	White flakes
Boiling point/range	Not applicable
Melting point/range	118°C (244°F)
Flash point	Non-combustible
Auto-ignition temperature	Not applicable
Vapour pressure	Not available
Solubility:	
- Solubility in water	167g/100g
Bulk density	800-900 kg/m <sup>3</sup>
Density	1.6 g/cm <sup>3</sup> (20°C)
pH	8.2 @ 10% aqueous solution
Decomposition temperature	>160°C

### 10. Stability and reactivity

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

### 11. Toxicological information

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

### 12. Ecological information

Information on ecological effects	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

IMO	Not regulated
ICAO/IATA	Not regulated
DOT	Not regulated

### 15. Regulatory information

<b>EU</b> - Indication of danger	Anhydrous MgCl <sub>2</sub> is reported EINECS 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> <b>Japan</b>	Listed 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 version in section(s)**  
3, 15

The information herein 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.

DEAD SEA WORKS Ltd, shall not be held liable for any damage resulting from handling or from contact with the above product. For further information, contact DEAD SEA WORKS Ltd.

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**End of safety data sheet**