DEAD SEA WORKS LTD

MATERIAL SAFETY DATA SHEET

Product name: MAG pellets
Product id: 8677-PL
Revision date: 04/07/2011
Supersedes: 08/09/2009

1. Identification of the substance & the company

Trade name: MAG Pellets
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.dswsalts.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

<table>
<thead>
<tr>
<th>Components</th>
<th>Weight %</th>
<th>Index No.</th>
<th>EC No.</th>
<th>EU Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>46.5-47.5</td>
<td>2320946 (anhydrous CAS 7786-30-3)</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>7791-18-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Salts</td>
<td>3-5</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>None</td>
</tr>
<tr>
<td>Water of crystallization</td>
<td>48.5-50.5</td>
<td>231-791-2</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>7732-18-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. First-aid measures

Eye contact  
Holding the eyelids apart, flush eyes promptly with copious flowing water for at least 20 minutes. Get medical attention if irritation persists.

Skin contact  
Wash with water in case of irritation. Get medical attention if irritation occurs and persists.

Inhalation  
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.

Ingestion  
If swallowed, wash mouth thoroughly with plenty of water. Get medical attention immediately.

************************************************************************
NOTE: Never give an unconscious person anything to drink.
************************************************************************

Notes to the physician  
In case of ingestion, the salt level in blood must be determined. Treat symptomatically and supportively.

5. Fire - fighting measures

Fire fighting procedure  
In closed stores, provide fire-fighters with self-contained breathing apparatus in positive pressure mode

Unusual fire and explosion hazards  
When heated to decomposition, may release poisonous and corrosive fumes of HCl

6. Accidental release measures

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

Methods for cleaning up  
Sweep up, place in a bag and hold for waste disposal or possible re-use

7. Handling and storage

Handling  
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:

<table>
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<tr>
<th>Components</th>
<th>ACGIH-TLV Data</th>
<th>OSHA (PEL) Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>Not determined</td>
<td>Not determined</td>
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<td>7791-18-6</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Ventilation requirements: Good general ventilation. Ventilation must be sufficient to maintain TLV-TWA below 3 mg/m³, respirable particles, and 10 mg/m³, 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: Safety shower and eye bath should be provided. Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking.
9. Physical and chemical properties

- **Appearance**: White pellets
- **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/m³
  - Density: 1.6 g/cm³ (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 MgCl2)
  - Mouse oral LD50: 7600 mg/kg (for MgCl2)
- **Mutagenicity**: Not available
- **Carcinogenicity**: Not classified by IARC
  - Not included in NTP 11th Report on Carcinogens

12. Ecological information

- **Information on ecological effects**: MgCl2 is a seawater component
# Material Safety Data Sheet

## Product Information

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## Disposal Considerations

### Waste Disposal

Observe all federal, state and local environmental regulations when disposing of this material.

### Disposal of Packaging

Containers can be recycled after proper cleaning.

## Transportation Information

<table>
<thead>
<tr>
<th>IMO</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAO/IATA</td>
<td>Not regulated</td>
</tr>
<tr>
<td>DOT</td>
<td>Not regulated</td>
</tr>
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</table>

## Regulatory Information

### EU

- **Indication of danger**: Anhydrous MgCl₂ is reported EINECS
- Not subject to labelling in accordance with EEC Directives.

### USA

Reported in the EPA TSCA Inventory.

### Australia

Listed in AICS

### Canada

Listed in DSL

### China Inventory

Listed

### Japan

Listed in ENCS

### New Zealand Inventory

Listed in NZIoC

### Philippines

Listed in PICCS
16. Other information

This data sheet contains changes from the previous version in section(s)
3, 15

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. 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.

Prepared by
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End of safety data sheet