SAFETY DATA SHEET

According to Canada Hazardous Products Regulation (WHMIS 2015)

Product name: MAG Flakes
Product id: 8677-FL
Revision date: 18/07/2018

1. Identification of the substance & the company

Product identifier: MAG Flakes
Chemical formula: MgCl2*6H2O
Type of product and use: Ice and dust control
Supplier: Dead Sea Work LTD
P.O.B. Beer Sheva 84100, Israel
Tel: +972-8-6465347
Fax: +972-8-6280533
www.dswsalts.com
Emergency Telephone: 972-8-9977577
CHEMTREC: (800) 424-9300
Medical: PROSAR 1-888-875-1685 (24HRS)

2. Hazards identification

GHS classification: Not classified
Labels and other form of warning: Not required.
Symbol(s): Not required.
NFPA Ratings (Scale 0-4): Health = 0, Fire = 0, Reactivity = 0.

3. Composition / information on ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>7791-18-6</td>
<td>Proprietary</td>
</tr>
</tbody>
</table>

4. First-aid measures

Eye contact: Flush with plenty of water. Get medical attention if irritation occurs and persists.
Skin contact: Wash with water in case of irritation. Get medical attention if irritation occurs and persists.
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Revision: 5

Inhalation
In case of inhalation, remove person to fresh air. If breathing difficulty or discomfort occurs and persists, seek medical attention.

Ingestion
Wash out mouth with water provided person is conscious. Obtain medical attention if any discomfort persists.

Most important symptoms and effects, acute or delayed
None known

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

5. Fire - fighting measures

Suitable extinguishing media
Material is not combustible. Use extinguishing media appropriate to surrounding fire conditions.

Extinguishing media not to be used
None known.

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

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

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 reuse.

Environmental precautions
Avoid access to streams, lakes or ponds.

7. Handling and storage

Handling
Handle in accordance with good industrial hygiene and safety procedures. Keep containers tightly closed.

Storage
Keep in a dry, well-ventilated place away from incompatible materials (see "materials to avoid").
8. Exposure controls / personal protection

Exposure Limits:

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

Ventilation requirements: Good general ventilation.

Personal protective equipment:
- Respiratory protection: Not normally required.
- Hand protection: Not required.
- 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 thoroughly after handling and before eating or smoking. Safety shower and eye bath should be provided.

9. Physical and chemical properties

Appearance: White flakes
Odor: None.
pH: 8.2 @ 10% aqueous solution
Melting point/range: 118°C (244°F)
Boiling point/range: Not applicable
Flash point: Not relevant.
Evaporation rate (ether=1): Not applicable under standard conditions
Flammability (solid, gas): Not flammable
Flammable/Explosion limits: Not applicable
Vapor pressure: Not available
Vapor density: Not determined
Density: 1.6 g/cm³ (20°C)
Solubility:
- Solubility in water: 167g/100g
Partition coefficient: Not determined
(n-octanol/water)
Auto-ignition temperature: Not self-ignitable
Decomposition temperature: >160°C
Viscosity: Not available
Bulk density: 800-900 kg/m³
Explosive properties: Not explosive
Oxidising properties: No oxidising properties can be predicted on the basis of chemical structure
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<td>18/07/2016</td>
</tr>
<tr>
<td>Revision</td>
<td>5</td>
</tr>
</tbody>
</table>

### 10. Stability and reactivity

- **Reactivity**: No reactive hazards known/expected.
- **Stability**: Stable under normal conditions
- **Possibility of hazardous reactions**: Not expected to occur
- **Conditions to avoid**: Exposure to moisture. Heating above decomposition temperature.
- **Materials to avoid**: Oxidizing agents.
- **Hazardous decomposition products**: Oxides of: potassium, calcium, magnesium and HCl.

### 11. Toxicological information

**Acute toxicity:**
- Rat oral LD50: 8100 mg/kg (for MgCl2)

**Skin corrosion/irritation**: Not irritant

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

**Respiratory or skin sensitisation**: No data available

**Mutagenicity**: Not established

**Carcinogenicity**: Not classified by IARC
Not included in NTP 14th Report on Carcinogens

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

**Specific Target Organ Toxicity (STOT) - Single exposure**: No data available

**Specific Target Organ Toxicity (STOT) - Repeat exposure**: No effects on specific target organs have been identified.

**Aspiration hazard**: Not expected to occur

### 12. Ecological information

**Note:**
MgCl2 is a seawater component

**Aquatic toxicity**: No data available
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Persistence and degradability
Not relevant for inorganic salts

Bioaccumulative potential
Not expected to bioaccumulate.

Mobility in soil
Expected to be mobile due to high solubility.

Note:
Not considered to be PBT or vPvB

13. 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. Dispose of in a safe manner in accordance with local/national regulations.

14. Transportation information

DOT
Not regulated

IMDG
Not regulated

ICAO/IATA
Not regulated

15. Regulatory information

USA
Reported in the EPA TSCA Inventory.

Canada
Listed in DSL

EU
Anhydrous MgCl₂ is reported in EINECS

Australia
Listed in AICS

China
- China inventory
Listed

Japan
Listed in ENCS

Korea
Listed in KECI KE-22691 (Anhydrous MgCl₂)

Mexico
Listed in the National Inventory of Chemical Substances (INSQ) (Anhydrous MgCl₂)

New Zealand Inventory
Listed in NZIoC
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Philippines: Listed in PICCS
Taiwan: Listed (TCSI)
Vietnam: Listed
Thailand: Listed

16. Other information

This data sheet contains changes from the previous version in section(s)
1,3,4,7,8,11,15

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.

Prepared by: HERA Division
telephone: +/972-8-6297835
Fax: +/972-8-6297832
www.icl-group.com
e-mail: msdsinfo@icl-group.com

End of safety data sheet