SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Product name	**MAG Flakes**	
Product id	8677-FL	
Revision date	18/07/2016	**Revision:** 4
Supersedes	04/07/2011	

1. Identification of the substance & the company

Trade name MAG Flakes

Chemical formula $MgCl_2*6H_2O$

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.

NFPA Ratings (Scale 0-4) Health = 0, Fire = 0, Reactivity = 0.

3. Composition / information on ingredients

Components	CAS No.	Weight %
Magnesium Chloride Hexahydrate	7791-18-6	>95

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 immediately.

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

Inhalation In case of inhalation, 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

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.

7. Handling and storage

Handling Keep containers tightly closed.

Storage Keep in a dry, well-ventilated place away from incompatible materials (see "materials to avoid").

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Product name	**MAG Flakes**	
Product id	8677-FL	
Revision date	18/07/2016	**Revision:** 4
Supersedes	04/07/2011	

8. Exposure controls / personal protection

Exposure Limits :

Components	ACGIH-TLV Data	OSHA (PEL) Data
Magnesium Chloride Hexahydrate 7791-18-6	Not determined	Not determined

Ventilation requirements Good general ventilation.

Personal protective equipment:

- **Respiratory protection** Not normally required; In case of dust formation use an approved particulate respirator.
- **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 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 (n-octanol/water)	Not determined
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

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Product name	**MAG Flakes**	
Product id	8677-FL	
Revision date	18/07/2016	**Revision:** 4
Supersedes	04/07/2011	

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	HCl. Oxides of: potassium, calcium, magnesium, sodium

11. Toxicological information

Acute toxicity:

- Rat oral LD50	8100 mg/kg (for MgCl2)
- Mouse oral LD50	7600 mg/kg (for MgCl2)
- Dermal irritation (rabbit)	Not irritant
- Eye irritation (rabbit)	Not irritant
Dermal sensitization	Not a sensitizer
Mutagenicity	Not established
Carcinogenicity	Not classified by IARC Not included in NTP 11th 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 effects on specific target organs have been identified
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

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Product name	**MAG Flakes**	
Product id	8677-FL	
Revision date	18/07/2016	**Revision:** 4
Supersedes	04/07/2011	

Aquatic toxicity	Not applicable
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 $MgCl_2$ is reported in EINECS
Japan	Listed in ENCS
Australia	Listed in AICS
New Zealand Inventory	Listed in NZIoC
China **- China inventory**	Listed
Taiwan	Listed
Philippines	Listed in PICCS

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Product name	**MAG Flakes**	
Product id	8677-FL	
Revision date	18/07/2016	**Revision:** 4
Supersedes	04/07/2011	

16. Other information

This data sheet contains changes from the previous version in section(s)
1,2,3,8,9,11,12,15

The information herein is based on the present state of our knowledge. It is believed to be correct but is not necessarily all- inclucive 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
telefax: +/972-8-6297832
www.icl-ip.com
e-mail:msdsinfo@icl-group.com

End of safety data sheet