

SAFETY DATA SHEET

MAG[®] - MAGNESIUM CHLORIDE FLAKES

MSDS NO.: KC009

Rev Date: 03-02-2015

Rev. Num. 00

1. IDENTIFICATION:

COMPANY NAME: Knight Chemicals LLC
ADDRESS: 7320 W. Florist Ave
Milwaukee, WI 53218
TELEPHONE: 1(800)825-7650
FAX: 1(414)461-0903

EMERGENCY CONTACT: Call CHEMTREC at 800-424-9300 for 24 hour Emergency Response involving a spill, leak, fire, exposure, or accident.

MANUFACTURER: Dead Sea Works LTD. – P.O.B. Beer Sheva 84100, Isreal

PRODUCT NAME / USE: MAG[®] - Magnesium Chloride Flakes

2. HAZARD(S) IDENTIFICATION:

EMERGENCY OVERVIEW:

APPEARANCE: White to off-white solid Flakes
ODOR: None
REACTIVITY: None
PRIMARY ROUTE OF ENTRY: Skin Contact

POTENTIAL HEALTH EFFECTS:

EYE: May cause moderate eye irritation. Rinse with water for at least 15 minutes (open eyes).

SKIN CONTACT: Short single exposure not likely to cause significant skin irritation

SKIN ABSORPTION: The substance is not dangerous. However, over exposure or contact with open wounds may cause slight irritation.

INGESTION: The substance is not dangerous. Obtain medical attention if discomfort continues.

INHALATION: The substance is not dangerous by inhalation.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

PRODUCT TRADE NAME: MAG®
CHEMICAL NAME: Magnesium Chloride Flakes
SYNONYMS: Magnesium Chloride Flakes
CHEMICAL FAMILY: Inorganic Salt
MOLECULAR FORMULA: MgCl₂
CAS NUMBER: 007791-18-6

<u>CHEMICAL</u>	<u>CAS No.</u>	<u>TLV (ACGIH)</u>	<u>PEL (OSHA)</u>
Magnesium Chloride	007791-18-6	None Established	
Calcium Chloride	010043-52-4	None Established	
Sodium Chloride	007647-14-5	None Established	
Potassium Chloride	007447-40-7	None Established	
Water	007732-18-5	None Established	

4. FIRST AID MEASURES

EYES: Irrigate with flowing water immediately and continuously for 15 minutes. Consult medical personnel.

SKIN: Wash off in flowing water or shower.

INGESTION: If swallowed, induce vomiting only as directed by medical personnel. Call a physician. (Never give anything by mouth or attempt to induce vomiting in an unconscious person.)

INHALATION: Remove to fresh air if effects occur, administer oxygen if necessary. Consult a physician.

5. FIRE-FIGHTING MEASURES:

FIRE & EXPLOSION HAZARD: Negligible fire hazard when exposed to heat or flame.

EXTINGUISHING MEDIA: This material does not burn. If exposed to fire from another source, use suitable extinguishing agent for that fire.

FIRE FIGHTING PROCEDURES: Keep people away. Isolate fire and deny unnecessary entry. This material does not burn. Fight fire for other material that is burning. Water should be applied in large quantities as a fine spray.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: Wear positive-pressure, self-containing breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-containing breathing apparatus and fight fire from a remote location.

6. ACCIDENTAL RELEASE MEASURES:

Action to take for spills/leaks: Losses incidental to correct application of this product in its intended uses are not expected to be harmful to the environment. Wear appropriate safety apparel during clean-up. See Section 8. Avoid entry of large amount of product into sewers, natural waters, and drinking water sources. Due to possible harmful effects, avoid contact with vegetation, animals and fish life. Recover quickly into suitable, dry sealable containers if reusing. Small quantities may be flushed away with plenty of water. Walking surfaces may remain wet longer due to moisture being held by spilled product--avoid by thoroughly water washing surfaces.

7. HANDLING & STORAGE

Comply with federal, state, and local laws, regulations and procedures when storing this product. Store in a tightly closed container. Store away from incompatible materials. Do not store in attic, upper floors or any area where leaking of contents could cause damage.

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Avoid eye and prolonged skin contact

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

EXPOSURE GUIDELINES: There are no occupational exposure limits established by OSHA, ACGIH or NIOSH.

VENTILATION: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guidelines. When respiratory protection is required for certain operations use an approved air-purifying respirator. In dusty atmospheres, use an approved dust respirator.

SKIN PROTECTION: For brief contact, no precautions other than clean body-covering clothing should be needed. Use protective clothing impervious to this material. Selection of specific items such as gloves, boots, aprons, or full-body suit will depend on operation. If skin comes in contact with contaminated clothing, remove the clothing immediately, wash skin area with soap and water, and launder clothing before reuse.

EYE PROTECTION: Safety glasses should be sufficient for most operations; however, for dusty operations or when handling solutions of the material, wear chemical goggles. Eye wash fountain should be located in immediate work area.

9. PHYSICAL & CHEMICAL PROPERTIES:

MELTING POINT:	N/A
BOILING POINT:	N/A
VAPOR PRESSURE:	N/A
VAPOR DENSITY:	N/A
SOLUBILITY IN WATER:	167 g/100 ml Water
SPECIFIC GRAVITY:	N/A
APPEARANCE:	White to off-white solid flakes
ODOR:	None
EVAPORATION RATE:	Not applicable
FLASH POINT:	None – Product is not combustible
METHOD USED:	Not applicable
FLAMMABLE LIMITS:	
LFL	Not applicable
UFL	Not applicable
AUTOIGNITION TEMPERATURE:	Not applicable
HYGROSCOPIC:	YES

10. STABILITY & REACTIVITY:

STABILITY: Stable. Hygroscopic.

CONDITIONS TO AVOID: Decomposes at >160° F

INCOMPATIBILITY: Excessive exposure to air will lead to wetting and caking,

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of: potassium, calcium, magnesium and sodium, and above 160°C decomposes giving HCl gases.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION:

Acute toxicity by manufacturer:

LD50 (oral rat) 8100 mg/kg

MAGNESIUM CHLORIDE:

LD50 (oral rat) 2800 mg/kg

CALCIUM CHLORIDE:

LD50 (oral rat) 1000 mg/kg

LD50 (oral mouse) 1940 mg/kg

SODIUM CHLORIDE:

LD50 (oral rat) 3000 mg/kg

LC50 (inhalation rat) 42000 mg/m³ (60 min)

LD50 (absorption through skin rabbit) 10000 mg/kg

POTASSIUM CHLORIDE:

LD50 (oral rat) 2600 mg/kg

LDLo (intraperitoneal dog) 85 mg/kg

LD50 (oral mouse) 383 mg/kg

LD50 (intraperitoneal rat) 660 mg/kg

12. ECOLOGICAL INFORMATION:

ENVIRONMENTAL HAZARDS: If properly introduced in small concentrations into adapted biological sewage treatment plants, decomposition of the activated sludge is not affected.

Not mentioned in the EC Regulations of 4/5/76 concerning discharge of dangerous materials into waters, neither in List I nor List II.

MgCl₂ is a component of seawater.

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHOD: Comply with federal, state, and local laws, regulations and procedures. Contact manufacturer and/or authorities for detailed information. Product as sold is not an RCRA listed or characteristic hazardous waste.

14. TRANSPORT INFORMATION:

U.S. DOT 49 CFR 172.101: Not Regulated

CANADIAN TRANSPORTATION OF DANGEROUS GOODS: Not Regulated

The Transportation of Dangerous Goods Act (**T.D.G.A.**) classification for this product is: Not Regulated

15. REGULATORY INFORMATION:

REGULATION INFORMATION: (Not meant to be all-inclusive--selected regulations represented.)

TSCA STATUS:	Yes
DSL STATUS:	Yes
EINECS STATUS:	Yes
OTHER TSCA ISSUES:	None

CALIFORNIA PROPOSITION 65: This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown below. However, no warranty, expressed or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See MSD Sheet for health and safety information.

16. OTHER INFORMATION:

Information contained on these sheets needs to be made available to your workers according to the OSHA Hazard Communication Standard 29CFR 1910.1200 and the Workplace Hazardous Materials Information System (WHMIS).

This Safety Data Sheet and the information it contains is offered to you in good faith as accurate, but there is no representation, guarantee or warranty, either expressed or implied, regarding its accuracy, reliability or completeness. This information relates to the specific product designated and may not be valid for such product used in combination with any other materials or in any other processes. Certain health and safety precautions given in this data sheet may not be adequate for all individuals and/or situations. It is the user's responsibility to use this product safely and to satisfy themselves as to the suitability and completeness of such information for their own particular use. Consult with appropriate experts to guard against hazards associated with the use of this product and its ingredients. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.

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