MATERIAL SAFETY DATA SHEET

****** SECTION 1 - COMPANY INFORMATION

NAME: **Knight Chemicals LLC** ADDRESS: 7320 West Florist Avenue Milwaukee, WI 53218

TELEPHONE: 414-461-0100 FAX:

EMERGENCY TELEPHONE NUMBER: Call Knight Chemicals LLC at 800-825-7650 for

****** SECTION 2 - PRODUCT IDENTIFICATION ************

MAG™ TOTAL ICE CONTROL **Product Trade Name:**

Chemical Name: Magnesium Chloride Hexahydrate Flake

Synonyms: MgCl₂ 6H₂O **Inorganic Salt** Chemical Family: CAS Number: 7791-18-6

414-461-0903

emergencies involving a spill, leak, fire, exposure, or accident.

Hazard Rating (HMIS/NFPA):

HAZARDOUS COMPONENTS/CAS# OSHA Pel **ACGIH TLV** Other Limit None None None None

Wt% Chemical Magnesium Chloride (MgCl₂) 46.0- 48%

Calcium Chloride 2.0 - 3.0% (CaCl₂)

Sodium Chloride 0.5 - 1.0%(NaCl) Potassium Chloride 0.2 - 1.0%(KCl)

Water (H_2O) Balance to 100%

****** DATA****** SECTION 4 - PHYSICAL DATA******************

FORM Flakes White COLOR ODOR: Odorless Change in physical state Hygroscopic

Not applicable, because not combustible Flash Point

Not Applicable Explosion hazard: 1.6 gr/cm^3 Density (20°C)

 $800 - 900 \text{ kg/m}^3$ Bulk Density: Solubility in water (20°C) 167 g/100 ml water

8.2 pH value:

Product: MAG™ Total Ice Control Effective Date: February 10, 2009

****** SECTION 5 - FIRE & EXPLOSION HAZARD DATA ***********

FLASH POINT:

FLAMMABLE LIMITS:

None

LEL:

NA

UEL:

NA

EXTINGUISHING MEDIA: Non-Flammable

FIRE AND EXPLOSION HAZARDS: None

SPECIAL FIRE FIGHTING PROCEDURES: None, product can be used to smother fires

CHEMICAL STABILITY: Stable CONDITIONS TO AVOID: None INCOMPATIBILITY: None

HAZARDOUS DECOMPOSITION PRODUCTS: Releases hydrogen chloride vapors if heated

over 300°F.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Excessive exposure to air will lead to

wetting & caking.

ROUTES OF ENTRY: Inhalation, Ingestion

HEALTH HAZARD: May cause slight irritation of eyes, skin &

respiratory tract.

CARCINOGENICITY:

NTP? No IARC Monographs? No OSHA Regulated? No

SIGNS & SYMPTOMS of EXPOSURE:

Medical Conditions Generally Aggravated By Exposure: Inhalation may cause slight respiratory irritation. Ingestion can cause stomach discomfort. Very low oral toxicity [LD 50 (rat) approx. 8,100 mg/kg].

Emergency First Aid Procedures: INGESTION - If discomfort exists, induce vomiting. Call a doctor immediately if discomfort persists. INHALATION - Move to fresh air, administer oxygen if necessary. EYE CONTAMINATION - Wash eyes with plenty of water. Obtain medical attention if discomfort exists. SKIN CONTACT - Wash thoroughly with soapy water.

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******************* SECTION 8- CONTROL MEASURES *************

Respiratory: Not required - NIOSH approved mask

Ventilation: Not required **Protective Devices:** Goggles

Work/Hygienic Practices: Gloves, goggles and disposable mask recommended if constantly

handled.

****** SECTION 9- PRECAUTIONS FOR SAFE HANDLING & USE ********

If Released Or Spilled: Sweep up all dry material and place in a suitable container. Flush area with water. Major spills may be loaded with front end loader. Uncontaminated product may be reused.

Waste Disposal Method: Disposal must be made in accordance with local regulations for non-toxic non-hazardous waste.

Precautions To Be Taken In Handling & Storing: Keep previously opened containers tightly closed. Do not store where seepage might be a problem. Due to its hydroscopic nature, MAG readily absorbs moisture from the air and softens rapidly.

Other Precautions:

Ecological Information:

Behavior and environmental

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

Ecotoxic effects Not available

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 sea water.

Transportation Information:

Is not a hazardous material according to the transport regulations.

Other Information:

The information contained herein is based on our present knowledge and is not meant to guarantee product properties.

Recipients of our product must take responsibility for observing existing laws and regulations.