

# MATERIAL SAFETY DATA SHEET

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GENERAL INFORMATION # : 314-647-1888  
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## I-PRODUCT IDENTIFICATION

### CHEM THAW (GRANULAR)

PRODUCT CODE: #046

CHEMICAL FORMULATION: GRANULAR ICE MELT

NFPA HAZARD IDENTIFICATION SYSTEM:

HEALTH:

FLAMMABILITY:

REACTIVITY:

HAZARD RATING: 4 - Extreme; 3 - High; 2 - Moderate; 1 - Slight; 0 - Insignificant

## II - HAZARDOUS INGREDIENTS

Hazardous Components (Specific Chemical Identity; Common Name (s))	CAS #	OSHA PEL	ACGIHTLV	Other Limits	
				Recommended	% optional
CALCIUM CHLORIDE	010043-52-4				90-97%
SODIUM CHLORIDE	007647-14-5				1-2%
POTASSIUM CHLORIDE	007447-40-7				2-3%
STRONTIUM CHLORIDE	010476-85-4				0-1%
WATER	007732-18-5				

### US REGULATIONS

SARA 313 INFORMATION: TO THE BEST OF OUR KNOWLEDGE, THIS PRODUCT CONTAINS NO CHEMICAL SUBJECT TO SARA TITLE III SECTION 313 SUPPLIER NOTIFICATION REQUIREMENTS.

SARA HAZARD CATEGORY: THIS PRODUCT HAS BEEN REVIEWED ACCORDING TO THE EPA "HAZARD CATEGORIES" PROMULGATED UNDER SECTIONS 311 AND 312 OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 (SARA TITLE III) AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES:

AN IMMEDIATE HEALTH HAZARD

THIS PRODUCT HAS BEEN CATEGORIZED AS AN "IMMEDIATE HEALTH HAZARD" DUE TO THE POSSIBILITY OF EYE OR SKIN IRRITATION.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

ALL INGREDIENTS ARE ON THE TSCA INVENTORY OR ARE NOT REQUIRED TO BE LISTED ON THE TSCA INVENTORY THE CAS NUMBER (S) FOR TSCA IS (ARE):

CAS# 010043-52-4

CAS# 007647-14-5

CAS# 007447-40-7

CAS# 010476-85-4

CAS# 007732-18-5

THIS PRODUCT IS A "HAZARDOUS CHEMICAL" AS DEFINED BY THE OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THIS PRODUCT HAS BEEN CATEGORIZED AS A "HAZARDOUS CHEMICAL" DUE TO THE POSSIBILITY OF EYE OR SKIN IRRITATION.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA OR SUPERFUND):

TO THE BEST OF OUR KNOWLEDGE, THIS PRODUCT CONTAINS NO CHEMICAL SUBJECT TO REPORTING UNDER CERCLA.

**Key:** PEL: Permissible Exposure Limit TLV: Threshold Limit Value C: Ceiling Level STEL: Short Term Exposure Limit

N/A: Not Applicable N/D: Not Determined N/E: Not Established Y: Yes N: No

302: CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).

355: SARA TITLE III/ List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).

372: SARA TITLE III/ List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

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## III - PHYSICAL DATA

**BOILING POINT (°C):** >1500F, >815C  
**MELTING POINT:** APPROX. 1424F, 772C  
**VAPOR PRESSURE (psig@25C):** <0.005 mmHg @ 20C  
**SPECIFIC GRAVITY (H2O=1)(@25C.):** 2.2  
**VAPOR DENSITY (AIR = 1):** N/A  
**VOC CONTENT (% by weight):**  
**SOLUBILITY IN WATER:** VERY SOLUBLE  
**EVAPORATION RATE (Butyl acetate=1):**  
**Ph(@25C):**  
**APPEARANCE AND ODOR:** WHITE TO OFF-WHITE SOLID PELLETS  
ODORLESS

## IV - FIRE AND EXPLOSION HAZARD

**FLASH POINT(°C):** N/A  
**FLAMMABLE LIMITS % BY VOLUME:** N/A  
**EXTINGUISHING MEDIA:** THIS MATERIAL DOES NOT BURN. IF EXPOSED TO FIRE FROM ANOTHER SOURCE, USE SUITABLE EXTINGUISHING AGENT FOR THAT FIRE  
**SPECIAL FIRE FIGHTING PROCEDURES:** KEEP PEOPLE AWAY. ISOLATE FIRE AREA AND DENY UNNECESSARY ENTRY  
**(TEST METHOD):**  
**UPPER:** N/E  
**LOWER:** N/E

**PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:** WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND FULL PROTECTIVE FIRE FIGHTING CLOTHING (INCLUDES FIRE FIGHTING HELMET, COAT, PANTS, BOOTS, AND GLOVES).

## V - REACTIVITY DATA

**STABILITY:** STABLE. HYGROSCOPIC.  
**INCOMPATIBILITY:** CORROSIVE TO SOME METALS. AVOID CONTACT WITH METALS SUCH AS: BRASS, MILD STEEL ALUMINUM, OR FERROUS METALS. FLAMMABLE HYDROGEN MAY BE GENERATED FROM CONTACT WITH METALS SUCH AS ZINC OR SODIUM. AVOID CONTACT WITH SULFURIC ACID. HEAT IS GENERATED WHEN MIXED WITH WATER.  
**CONDITIONS TO AVOID:** AVOID OXIDIZING MATERIALS  
**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:** DOES NOT DECOMPOSE  
**HAZARDOUS POLYMERIZATION:** WILL NOT OCCUR  
**CONDITIONS TO AVOID:** NONE KNOWN

## VI - HEALTH AND HAZARD DATA

### TOXICOLOGICAL INFORMATION

ACUTE: SKIN: THE LD50 FOR SKIN ABSORPTION IN RABBITS IS > 5000 mg/kg.

INGESTION: THE ORAL LD50 FOR RATS IS BETWEEN 967-1668 mg/kg

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): FOR CaCl2, IN VITRO MUTAGENICITY STUDIES WERE NEGATIVE

### ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE: MOVEMENT & PARTITIONING: PARTITIONING FROM WATER TO N-OCTANOL IS NOT APPLICABLE

ECOTOXICOLOGY: BASED LARGELY OR COMPLETELY ON DATA FOR MAJOR COMPONENT(S). MATERIAL IS PRACTICALLY NON-TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS (LC50 GREATER THAN 100 mg/L IN MOST SENSITIVE SPECIES).

### POTENTIAL HEALTH EFFECTS

**EYE:** PELLETS MAY CAUSE SLIGHT EYE IRRITATION. DUSTS MAY CAUSE SEVERE IRRITATION WITH CORNEAL INJURY EFFECTS MAY BE SLOW TO HEAL. WHEN DISSOLVING, THE HEAT PRODUCED MAY CAUSE MORE INTENSE EFFECTS AS WELL AS THERMAL BURNS.

**SKIN:** SHORT SINGLE EXPOSURE NOT LIKELY TO CAUSE SIGNIFICANT SKIN IRRITATION. PROLONGED OR REPEATED EXPOSURE MAY CAUSE SKIN IRRITATION, EVEN A BURN. MAY CAUSE MORE SEVERE RESPONSE IF SKIN IS DAMP OR IF MATERIAL IS CONFINED TO SKIN. MAY CAUSE MORE SEVERE RESPONSE IF SKIN IS ABRADED (SCRATCHED OR CUT). WHEN DISSOLVING, THE HEAT PRODUCED MAY CAUSE MORE INTENSE EFFECTS AS WELL AS THERMAL BURNS. NOT CLASSIFIED AS CORROSIVE ACCORDING TO DOT. A SINGLE PROLONGED EXPOSURE IS NOT LIKELY TO RESULT IN THE MATERIAL BEING ABSORBED THROUGH SKIN IN HARMFUL AMOUNTS.

**INGESTION:** SINGLE DOSE ORAL TOXICITY IS CONSIDERED TO BE LOW. SMALL AMOUNTS SWALLOWED INCIDENTAL TO NORMAL HANDLING OPERATIONS ARE NOT LIKELY TO CAUSE INJURY; SWALLOWING AMOUNTS LARGER THAN THAT MAY CAUSE INJURY. INGESTION MAY CAUSE GASTROINTESTINAL IRRITATION OR ULCERATION.

**INHALATION:** VAPORS ARE UNLIKELY DUE TO PHYSICAL PROPERTIES. DUST MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT.

**SYSTEMIC & OTHER EFFECTS:** NO RELEVANT INFORMATION FOUND

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## EMERGENCY AND FIRST AID PROCEDURES

**IF IN EYES:** IRRIGATE WITH FLOWING WATER IMMEDIATELY AND CONTINUOUSLY FOR 15 MINUTES. CONSULT MEDICAL PERSONNEL

**IF ON SKIN:** WASH OFF IN FLOWING WATER OR SHOWER

**IF SWALLOWED:** SEEK MEDICAL ATTENTION. DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL

**IF INHALED:** REMOVE TO FRESH AIR IF EFFECTS OCCUR. CONSULT A PHYSICIAN

**NOTE TO PHYSICIAN:** IF BURN IS PRESENT, TREAT AS ANY THERMAL BURN, AFTER DECONTAMINATION. NO SPECIFIC ANTIDOTE SUPPORTIVE CARE. TREATMENT BASED ON JUDGMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE PATIENT

## VII - SPILL AND LEAK PROTECTION

### ACCIDENTAL RELEASE MEASURES

**PROTECT PEOPLE:** ISOLATE AREA. AVOID CONTACT WITH EYES AND SKIN. MAY BE A SLIPPING HAZARD. STOP LEAK IF IT CAN BE DONE SAFELY. WASH EXPOSED BODY AREAS THOROUGHLY AFTER HANDLING. USE APPROPRIATE SAFETY EQUIPMENT.

**PROTECT THE ENVIRONMENT:** FOR SMALL SPILLS: LOSSES INCIDENTAL TO CORRECT APPLICATIONS OF THIS PRODUCT IN ITS INTENDED USES ARE NOT EXPECTED TO BE HARMFUL TO THE ENVIRONMENT. FOR LARGE SPILLS: AVOID CONTAMINATION OF DRINKING WATER, NATURAL WATER, GROUND WATER OR ANY WATERWAY. LOSSES INCIDENTAL TO CORRECT APPLICATIONS OF THIS PRODUCT IN ITS INTENDED USES ARE NOT EXPECTED TO BE HARMFUL TO THE ENVIRONMENT.

**CLEANUP:** FOR SMALL SPILLS: CONTAIN SPILL IF POSSIBLE. COLLECT MATERIAL IN A SUITABLE AND PROPERLY LABELED CONTAINER. FLUSH RESIDUE WITH PLENTY OF WATER.

FOR LARGE SPILLS: DIKE AND TRANSFER TO SUITABLE AND PROPERLY LABELED CONTAINERS. FLUSH RESIDUE WITH PLENTY OF WATER.

**WASTE DISPOSAL METHOD:** DO NOT DUMP INTO ANY SEWERS, NO THE GROUND, OR INTO ANY BODY OF WATER. ALL DISPOSAL METHODS MUST BE IN COMPLIANCE WITH ALL FEDERAL, STATE/PROVINCIAL AND LOCAL LAWS AND REGULATIONS. REGULATIONS MAY VARY IN DIFFERENT LOCATIONS. WASTE CHARACTERIZATIONS AND COMPLIANCE WITH APPLICABLE LAWS ARE THE RESPONSIBILITY SOLELY OF THE WASTE GENERATOR. CHEMCO INDUSTRIES, INC. HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPING IN ITS INTENDED CONDITION.

FOR UNUSED & UNCONTAMINATED PRODUCT, THE PREFERRED OPTIONS INCLUDE SENDING TO A LICENSED, PERMITTED: RECLAIMED, LANDFILL, OR WASTE WATER TREATMENT SYSTEM.

## VIII - SPECIAL PROTECTION INFORMATION

**VENTILATION RECOMMENDED:** 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 GUIDELINE WHEN RESPIRATORY PROTECTION IS REQUIRED FOR CERTAIN OPERATIONS, USE AN APPROVED AIR-PURIFYING RESPIRATOR. IN DUSTY ATMOSPHERES, USE AN APPROVED DUST RESPIRATOR.

**PROTECTIVE GLOVES:** USE GLOVES IMPERVIOUS TO THIS MATERIAL EVEN FOR BRIEF EXPOSURES.

**EYE PROTECTION:** USE SAFETY GLASSES. FOR DUSTY OPERATIONS OR WHEN HANDLING SOLUTIONS OF THE MATERIAL, WEAR CHEMICAL GOGGLES

**OTHER PROTECTIVE EQUIPMENT:** 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 FACESHIELD, GLOVES, BOOTS, APRON OR FULL-BODY SUIT WILL DEPEND ON OPERATION.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** HEAT DEVELOPED DURING DILUTED OR DISSOLVING IS VERY HIGH. USE COOL WATER WHEN DILUTING OR DISSOLVING (TEMPERATURE LESS THAN 80F, 27C).

### EXPOSURE GUIDELINES:

CALCIUM CHLORIDE: Dow IHG is 10mg/m<sup>3</sup>

SODIUM CHLORIDE: Dow IHG IS 10mg/m<sup>3</sup>

POTASSIUM CHLORIDE: Dow IHG is 10mg/m<sup>3</sup>

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