



## SAFETY DATA SHEET (SDS)

Section 1: PRODUCT & COMPANY IDENTIFICATION		
Product Name	Twenty Below Zero, Ice Melter	
CAS #	7791-18-6, 7647-14-5, 010043-52-4	
Product Use	De-icer	
Manufacturer(s)	Blending/Bagging	
	<b>Salt Depot Inc</b> 5442 Wells Park Road West Jordan, Utah 84084 801-282-1250	
Supplier	<b>Salt Depot Inc</b> 5442 Wells Park Road West Jordan, Utah 84084 801-282-1250	
24 Hour Hotline	<b>CHEMTREC</b> 800-424-9300	
Section 2: HAZARDS IDENTIFICATION		
Emergency Overview	CAUTION Contact may cause eye and skin irritation.	
Potential Short Term Health Effects		
Routes of Exposure	Eye, Skin Contact, Inhalation, Ingestion.	
Eyes	May cause irritation.	
Skin	May cause irritation.	
Inhalation	Dusts of this product may cause irritation of the nose, throat, and respiratory tract.	
Ingestion	May cause stomach distress, nausea or vomiting.	
Target Organs	Eyes. Skin. Respiratory system.	
Chronic Effects	Prolonged or repeated exposure can cause drying, defatting and dermatitis.	
Signs and Symptoms	Symptoms may include redness, edema, drying, defatting, and cracking of skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.	
Section 3: COMPOSITION / INFORMATION ON INGREDIENTS		
<b>Ingredient(s)</b>	<b>CAS#</b>	<b>Percent</b>
Magnesium Chloride	7791-18-6	1%
Sodium Chloride	7647-14-5	87%
Calcium Chloride	010043-52-4	11%
Potassium		1%
Acid Blue Liquid Colorant Blend (Xanthene and Triphenylmethane dyes)		
Section 4: FIRST AID MEASURES		
First Aid Procedures		
Eye Contact	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.	
Skin Contact	Flush with cool water. Wash with soap & water. Obtain medical attention if irritation persists.	
Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.	
Ingestion	Do not induce vomiting. Rinse mouth with water, then drink 1 to 2 glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.	
Notes to Physician	Symptoms may be delayed.	
General Advice	None Available.	
Section 5: FIRE FIGHTING MEASURES		
Flammable Properties	Not flammable by WHMIS/OSHA criteria.	
Flash Point & Method	N/A	
Flammable Limits	N/A	
Extinguishing Media		
Suitable Extinguishing Media	Treat for surround material, water spray, dry chemicals, foam or carbon dioxide.	
Unsuitable Extinguishing Media	N/A	

**Section 5: FIRE FIGHTING MEASURES, continued**

**Protection of Firefighters**  
**Specific Hazards Arising from the Chemical** N/A  
**Protective Equipment for Firefighters** Firefighters should wear full protective clothing, including self contained breathing apparatus.  
**Unusual Fire & Explosion Hazards** None

**NFPA FIRE HAZARDS**

Health: 1  
 Fire: 0  
 Reactivity: 0  
 Specific: N/A

LEGEND	Minimal	0
	Slight	1
	Moderate	2
	Serious	3
	Severe	4

**Section 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions** Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.  
**Methods of Containment** None necessary.  
**Methods for Cleaning Up** Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. Discard containers except for storage and shipment of original product.

**Section 7: HANDLING & STORAGE**

**Handling** Avoid breathing dusts from this material.  
**Storage** Keep out of reach of children. Keep containers tightly closed in a cool, well-ventilated place.

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Limits**  
**Ingredient(s)**  
 Sodium Chloride  
 Exposure Limits  
 ACGIH-TLV  
 Not established  
 OSAH-PEL  
 Not established  
 Magnesium Chloride  
 ACGIH-TLV  
 Not established  
 OSAH-PEL  
 Not established

**Engineering Controls**  
 TWA PEL: No specific limits have been established for magnesium chloride & sodium chloride (a soluble substance). As a guideline, OSHA has established the following limits which are generally recognized for inert or nuisance dust. Particulates not otherwise regulated (PNOR):  
 5mg/cu.m. Respirable dust 8-hr TWA PEL, 15mg/cu.m. Total dust 8-hr TWA PEL  
  
 TWA TLV: No specific limits have been established for magnesium chloride & sodium chloride (a soluble substance). As a guideline, ACGIH has established the following limits which are generally recognized for inert or nuisance dust. Particulates not otherwise classified (PNOC):  
 10mg/cu.m. Respirable dust 8-hr TWA TLV, 15mg/cu.m. Total dust 8-hr TWA TLV  
  
 Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limits.

**Personal Protective Equipment**  
**Eye / Face Protection** Safety Glasses.  
**Hand Protection** Rubber gloves. Confirm with a reputable supplier first.  
**Skin & Body Protection** As required by employer code.  
**Respiratory Protection** Where exposure guideline may be exceeded, use an approved NIOSH respirator or NIOSH approved filtering facepiece.  
  
**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks & immediately after handling product.

**Section 9: PHYSICAL & CHEMICAL PROPERTIES**

Appearance	Crystalline
Color	Blue
Form	Crystalline
Odor	Slightly aromatic
Odor Threshold	Not available
Physical State	Solid
pH	6-8 neutral
Melting Point	800.9 C (1473.8 F)
Freezing Point	Not available
Boiling Point	1413 C (2575.4 F)
Flash Point	Not available
Evaporation Rate	Not available
Flammability limits in air, lower, % by volume	Not applicable
Flammability limits in air, upper, % by volume	Not applicable
Vapor Pressure	0.1 kPa (1 mmhg)@865 C
Vapor Density	Not applicable
Specific Gravity	2.17 (H@) @20 C
Relative Density	2.17 g/cm3
Octanol/Water Coefficient	Not available
Solubility (H2O)	36g/100g H2O @ 20 C
Partition Coefficient	Not available
Auto-ignition Temperature	Not available
Percent Volatile	0% w/w
Molecular Weight	58.4400 g/mole
Molecular Formula	NaCl, MgC12.6H2O

**Section 10: CHEMICAL STABILITY REACTIVITY INFORMATION**

Chemical Stability	Stable under recommended storage conditions.
Conditions to Avoid	Do not mix with incompatible materials.
Incompatible Materials	Reactive with oxidizing agents, acids, metals in presence of moisture, lithium, bromine, trifluoride.
Hazardous Decomposition Products	May include and are not limited to: Halogenated compounds. Hydrogen chloride.
Possibility of Hazardous Reactions	

**Section 11: TOXICOLOGICAL INFORMATION**

Component Analysis-LC50	
Ingredients	LC50
Magnesium Chloride	Not available
Sodium Chloride	>21000 mg/m3 rat
Component Analysis-Oral LD50	
Ingredients	LD50
Magnesium Chloride	8100 mg/kg rat; 7600 mg/kg mouse
Sodium Chloride	3000 mg/kg rat
Effects of Acute Exposure	
Eye	May cause irritation.
Skin	May cause irritation.
Inhalation	Dust of this product may cause irritation of the nose, throat, & respiratory tract.
Ingestion	May cause stomach distress, nausea or vomiting.
Sensitization	Not classified or listed by IARC, NTP, OSHA, and ACGIH.
Chronic Effects	Not classified or listed by IARC, NTP, OSHA, and ACGIH.
Carcinogenicity	Not classified or listed by IARC, NTP, OSHA, and ACGIH.
Mutagenicity	Not classified or listed by IARC, NTP, OSHA, and ACGIH.
Reproductive Effects	Not classified or listed by IARC, NTP, OSHA, and ACGIH.
Teratogenicity	Not classified or listed by IARC, NTP, OSHA, and ACGIH.

**Section 12: ECOLOGICAL INFORMATION**

Ecotoxicity	May be harmful to freshwater aquatic species and to plants that are not tolerant.
Environmental Effects	Not available.
Aquatic Toxicity	Not available.
Persistence / Degradability	Not available.
Bioaccumulation / Accumulation	Not available.
Mobility in Environmental Media	Not available.
Chemical Fate Information	Not available.

**Section 13: DISPOSAL CONSIDERATIONS**

Waste codes Not available.  
Disposal instruction Waste must be disposed of in accordance with federal, state & local environmental controls.  
Wasteform Residues / Unused Products Not available.  
Contaminated Packaging Not available.

**Section 14: TRANSPORTATION INFORMATION**

Department of Transportation (DOT)  
Not regulated as dangerous goods  
Transportation of Dangerous Goods (TDG)  
Not regulated as dangerous goods

**Section 15: REGULATORY INFORMATION**

Canadian Federal Regulations This product has been classified in accordance with the hazard criteria of the controlled products regulations and the MSDS contains all the information required.  
US Federal Regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910. 1200.  
Occupational Safety & Health Administration  
29 CFR 1910.1200 Hazardous Chemical No  
CERCLA (Superfund) Reportable Quantity  
None  
Superfund Amendments and Reauthorization Act of 1986 (SARA)  
Hazard Categories Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No  
Section 302 Extremely Hazardous Substance No  
Section 311 Hazardous Chemical  
Clean Air Act (CAA) Not available.  
Clean Water Act (CWA) Not available.  
Safe Drinking Act (SDWA) Not available.  
Drug Enforcement Agency (DEA) Not available.  
Food and Drug Administration Not available.  
WHMIS Status Not controlled.  
State Regulations This product does not contain any chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.  
Inventory Name  
Country or Region Inventory Name On Inventory (yes/no)  
Canada Domestic Substances List (DSL) Yes  
Canada Non-Domestic Substances List (NSDL) No  
United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes  
A "YES" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

**Section 16: OTHER INFORMATION**

Disclaimer Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

SDS Revision Date 15-Jul-2014  
Other Information This SDS conforms to the ANSI Z400.1/Z129-2010 (Rev. 12/2012)