



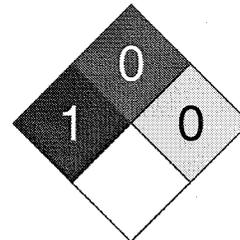
# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product Name** Aspen Snow & Ice Melter  
**CAS #** Mixture  
**Product use** De-icer.  
**Manufacturer** North American Salt Company  
 A Compass Minerals Company  
 9900 West 109th Street, Suite 600  
 Overland Park, KS 66210 US  
 Phone: 913-344-9200  
**CHEMTREC** 1-800-424-9300  
**CANUTEC** 1-613-996-6666

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 1
Flammability	0
Physical Hazard	0
Personal Protection	E



## 2. Hazards Identification

**Emergency overview** CAUTION  
 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 the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

## 3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Sodium chloride	7647-14-5	60 - 100
Magnesium chloride, hexahydrate	7791-18-6	3 - 7
Corrosion Inhibitor Complex	Mixture	0.1 - 1

## 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 and water. Obtain medical attention if irritation persists.

**Inhalation** If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

<b>Ingestion</b>	Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.
<b>Notes to physician</b>	Symptoms may be delayed.
<b>General advice</b>	None Available.

## 5. Fire Fighting Measures

<b>Flammable properties</b>	Not flammable by WHMIS/OSHA criteria.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Treat for surrounding material.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Not available
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of magnesium. Hydrogen chloride.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

## 6. Accidental Release Measures

<b>Personal precautions</b>	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. If necessary: Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<b>Methods for containment</b>	Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for cleaning up</b>	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.

## 7. Handling and Storage

<b>Handling</b>	Avoid breathing dusts from this material. Use good industrial hygiene practices in handling this material.
<b>Storage</b>	Keep out of reach of children. Keep containers tightly closed in a cool, well-ventilated place.

## 8. Exposure Controls / Personal Protection

### Exposure limits

Ingredient(s)	Exposure Limits
Corrosion Inhibitor Complex	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Magnesium chloride, hexahydrate	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Sodium chloride	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established

### Engineering controls

TWA PEL: No specific limits have been established for sodium chloride or magnesium chloride (soluble substances). As a guideline, OSHA (United States) 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-Hour TWA PEL, 15mg/cu.m. Total Dust 8-Hour TWA PEL.

TWA TLV: No specific limits have been established for sodium chloride or magnesium chloride (soluble substances). As a guideline, ACGIH (United States) has established the following limits which are generally recognized for inert or nuisance dust. Particulates (insolubles) Not Otherwise Classified (PNOC): 10mg/cu.m. Inhalable Particulate 8-Hours TWA TLV, 3mg/cu.m. Respirable Particulate 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 limit. General ventilation normally adequate.

### Personal protective equipment

<b>Eye / face protection</b>	Safety glasses
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Skin and body protection</b>	As required by employer code.
<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator or NIOSH-approved filtering facepiece.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

## 9. Physical & Chemical Properties

<b>Appearance</b>	Crystalline.
<b>Color</b>	White
<b>Form</b>	Crystalline.
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Solid
<b>pH</b>	Basic
<b>Melting point</b>	Not applicable
<b>Freezing point</b>	Not applicable
<b>Boiling point</b>	Not applicable
<b>Flash point</b>	None
<b>Evaporation rate</b>	Not applicable

Flammability limits in air, lower, % by volume	Not applicable
Flammability limits in air, upper, % by volume	Not applicable
Vapor pressure	Not applicable
Vapor density	Not applicable
Specific gravity	Not applicable
Octanol/water coefficient	Not applicable
Solubility (H2O)	Partially soluble
Auto-ignition temperature	Not applicable
Percent volatile	Not applicable

## 10. Chemical Stability & Reactivity Information

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with incompatible materials.
Incompatible materials	Incompatible with acids and oxidizing agents. Slightly reactive to reactive with metals.
Hazardous decomposition products	May include and are not limited to: Oxides of magnesium. Hydrogen chloride.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

## 11. Toxicological Information

### Component analysis - LC50

Ingredient(s)	LC50
Corrosion Inhibitor Complex	Not available
Magnesium chloride, hexahydrate	Not available
Sodium chloride	> 21000 mg/m3 rat

### Component analysis - Oral LD50

Ingredient(s)	LD50
Corrosion Inhibitor Complex	Not available
Magnesium chloride, hexahydrate	8100 mg/kg rat; 7600 mg/kg mouse
Sodium chloride	3000 mg/kg rat; 4000 mg/kg mouse

### Effects of acute exposure

Eye	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.
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.

## 12. Ecological Information

Ecotoxicity	May be harmful to freshwater aquatic species and to plants that are not saline tolerant.
Environmental effects	Not available
Aquatic toxicity	Not available
Persistence / degradability	Not available
Bioaccumulation / accumulation	Not available
Partition coefficient	Not applicable
Mobility in environmental media	Not available

Chemical fate information Not available  
Other adverse effects Not available

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### 13. Disposal Considerations

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Waste codes Not available  
Disposal instructions Waste must be disposed of in accordance with federal, state/provincial and local environmental control regulations.  
Waste from residues / unused products Not available  
Contaminated packaging Not available

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### 14. Transport Information

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U.S. Department of Transportation (DOT)  
Not regulated as dangerous goods.  
Transportation of Dangerous Goods (TDG - Canada)  
Not regulated as dangerous goods.

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### 15. Regulatory Information

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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 by the Controlled Products Regulations.

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.  
All components are on the U.S. EPA TSCA Inventory List.  
  
CERCLA/SARA Hazardous Substances - Not applicable.

Occupational Safety and Health Administration (OSHA)  
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 No

Clean Air Act (CAA) Not available  
Clean Water Act (CWA) Not available  
Safe Drinking Water Act (SDWA) Not available  
Drug Enforcement Agency (DEA) Not available  
Food and Drug Administration (FDA) Not available

WHMIS status Not Controlled

State regulations WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Inventory name

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	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)

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## 16. Other Information

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**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 use 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.

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