



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name Aspen Snow & Ice Melter
Product use De-icer
Manufacturer North American Salt Company
A Compass Minerals Company
9900 West 109th Street, Suite 100
Overland Park, KS 66210 US
Phone: 913-344-9200
CHEMTREC 1-800-424-9300

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.

OSHA Regulatory Status This product is NOT known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects See section 12.

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 Brush away excess of dry material. 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.

Ingestion Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Notes to physician Symptoms may be delayed.

General advice If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

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

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas.
Methods for containment	Stop the flow of material, if this is without risk.
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.

7. Handling and Storage

Handling	Use good industrial hygiene practices in handling this material. Avoid breathing dusts from this material.
Storage	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	ACGIH-TLV Not established OSHA-PEL Not established
Magnesium chloride, hexahydrate	ACGIH-TLV Not established OSHA-PEL Not established
Sodium chloride	ACGIH-TLV Not established OSHA-PEL 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.

Personal protective equipment

Eye / face protection

Safety glasses

Hand protection

Rubber gloves. Confirm with a reputable supplier first.

Skin and body protection

As required by employer code.

Respiratory protection

Where exposure guideline levels 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 and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Crystalline.
Color	White
Form	Crystalline.
Odor	Odorless
Odor threshold	Not available
Physical state	Solid
pH	Basic
Melting point	Not applicable
Freezing point	Not applicable
Boiling point	Not applicable
Pour point	Not available
Evaporation rate	Not applicable
Flash point	None
Auto-ignition temperature	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 (H ₂ O)	Partially soluble
Percent volatile	Not applicable
Viscosity	Not available

10. Stability and Reactivity

Reactivity	Slightly reactive to reactive with metals.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with incompatible materials.

Incompatible materials Acids. Oxidizers.
Hazardous decomposition products May include and are not limited to: Hydrogen chloride. Chlorine. Oxides of magnesium. Oxides of sodium.

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
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.

Name of Toxicologically Synergistic Products Not available

12. Ecological Information

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

13. Disposal Considerations

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

14. Transport Information

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

15. Regulatory Information

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical No

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.

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

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Inventory status

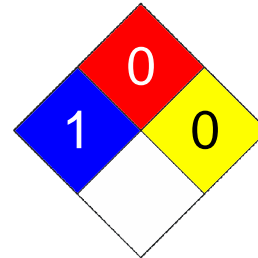
Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

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

Health	/ 1
Flammability	0
Physical Hazard	0
Personal Protection	E



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.

Issue date 09-Sep-2011

Effective date 31-Oct-2011

Expiry date 31-Oct-2014

Prepared by Dell Tech Laboratories Ltd. (519) 858-5021

Other information This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.