



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product name	Safe Step® Extreme 7300 Calcium Chloride
CAS #	Mixture
Product use	De-icer
Manufacturer information	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
CANUTEC	1-613-996-6666

2. Hazards Identification

Emergency overview	CAUTION CAUSES EYE IRRITATION.
Potential short term health effects	
Routes of exposure	Eye, Skin contact, Inhalation, Ingestion. Eye, Skin contact, Ingestion.
Eyes	Causes irritation.
Skin	Prolonged skin contact may cause skin irritation.
Inhalation	May cause respiratory tract irritation.
Ingestion	May cause stomach distress, nausea or vomiting.
Target organs	Eyes. Skin.
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 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

Components	CAS #	Percent
Calcium chloride	10043-52-4	60 - 100

4. First Aid Measures

First aid procedures	
Eye contact	Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention if irritation develops or 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.
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). Show this safety data sheet to the doctor in attendance. Avoid contact with eyes. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Not flammable by WHMIS/OSHA criteria.
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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 and precautions 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 gas. Calcium oxide
Explosion data	
Sensitivity to mechanical impact	Not available.
Sensitivity to static discharge	Not available.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.
Methods for containment	Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas.
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. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

7. Handling and Storage

Handling	Use good industrial hygiene practices in handling this material. Avoid contact with eyes. Avoid breathing dust. Wash thoroughly after handling.
Storage	Keep out of reach of children. Store in a closed container away from incompatible materials.

8. Exposure Controls/Personal Protection

Exposure limits	<p>TWA PEL: No specific limits have been established for calcium chloride (soluble substance). 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.</p> <p>TWA TLV: No specific limits have been established for calcium chloride (soluble substance). 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.</p>
Engineering controls	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
Personal protective equipment	
Eye / face protection	Wear safety glasses with side shields.
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.
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	Pellets
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Color	White
Form	Solid.
Odor	Odorless
Odor threshold	Not available.
Physical state	Solid.
pH	Not Available
Freezing point	Not available.
Boiling point	Not Available
Pour point	Not available.
Evaporation rate	Not Available
Flash point	Not available.
Auto-ignition temperature	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not Available
Vapor density	Not Available
Specific gravity	Not Available
Partition coefficient (n-octanol/water)	Not available.
Solubility (water)	Not Available
Relative density	0.75 g/cm ³ @20°C
Viscosity	Not available.
VOC	Not available
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	None known.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Acids. Oxidizers. Hot water.
Hazardous decomposition products	May include and are not limited to: Hydrogen chloride. Chlorine gas. Calcium oxide

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Calcium chloride (CAS 10043-52-4)		
Acute		
<i>Dermal</i>		
LD50	Rat	2630 mg/kg
<i>Oral</i>		
LD50	Mouse	1940 mg/kg
	Rat	1000 mg/kg

Effects of acute exposure

Eye contact	Causes irritation.
Skin contact	Prolonged skin contact may cause skin irritation.
Inhalation	May cause respiratory tract irritation.
Ingestion	May cause stomach distress, nausea or vomiting.

Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Chronic effects	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity	Not classified or listed by IARC, NTP, OSHA and ACGIH.
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.
Reproductive effects	Non-hazardous by WHMIS/OSHA criteria.
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.
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. See below

Ecotoxicological data

Components	Species	Test Results
Calcium chloride (CAS 10043-52-4)		
Aquatic		
Crustacea	EC50	Daphnia
		52 mg/L, 48 Hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>)
		3930 - 5360 mg/l, 96 hours

Persistence and degradability Not available.

Bioaccumulation / Accumulation Not available

Mobility in environmental media Not available.

Environmental effects Not available.

Aquatic toxicity Not available.

Partition coefficient Not available.

Chemical fate information Not available.

13. Disposal Considerations

Disposal instructions Review federal, state/provincial, and local government requirements prior to disposal.

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.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

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 by the Controlled Products Regulations.

Canada Priority Substances List (Second List): Listed substance

Calcium chloride (CAS 10043-52-4) Listed.

WHMIS status Controlled

WHMIS classification Class D - Division 2B

WHMIS labeling



Occupational Safety and Health Administration (OSHA)**29 CFR 1910.1200** Yes
hazardous chemical**US federal regulations** This product is 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.**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories** Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No**State regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

US - Texas Effects Screening Levels: Listed substance

Calcium chloride (CAS 10043-52-4) Listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

US. Rhode Island RTK

Not regulated.

Inventory status

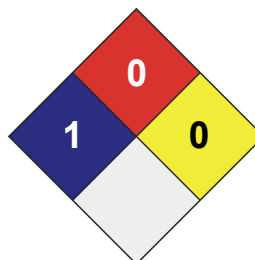
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

**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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Prepared by	Dell Tech Laboratories, Ltd. Phone: (519) 858-5021
Other information	This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.