



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product name Thawrox
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 United States
Phone: 913-344-9200
CANUTEC 1-613-996-6666
CHEMTREC 1-800-424-9300
Supplier Sifto Canada, Inc.
6700 Century Ave., Suite 202
Mississauga, ON L5N 6A4 Canada
Phone: (905) 567-0231

2. Hazards Identification

Emergency overview 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 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

Components	CAS #	Percent
Sodium chloride	7647-14-5	60 - 100
Thawrox Treated Salt Liquid Additive	Mixture	1 - 5

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 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. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.
Notes to physician Not available
General advice If you feel unwell, seek medical advice (show the label where possible). Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Not flammable by WHMIS/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 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: Chlorine. Oxides of sodium.
Explosion data	
Sensitivity to mechanical impact	Not available.
Sensitivity to static discharge	Not available.

6. Accidental Release Measures

Personal precautions	Avoid dust generation.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.
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. 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 breathing dusts from this material. 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

Engineering controls	<p>TWA PEL: No specific limits have been established for sodium chloride (a 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 sodium chloride (a 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> <p>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.</p>
Personal protective equipment	
Eye / face protection	Safety glasses if eye contact is possible.
Hand protection	If there is constant skin contact, rubber gloves are recommended.
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	Variable
Form	Crystals
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	Not available.
Viscosity	Not available.
VOC	Not available
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	Reactive with oxidizing agents, acids, lithium, bromine trifluoride.
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. Lithium Bromine trifluoride.
Hazardous decomposition products	May include and are not limited to: Chlorine. Oxides of sodium.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Sodium chloride (CAS 7647-14-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	10000.1 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 21000 mg/m3
<i>Oral</i>		
LD50	Mouse	4000 mg/kg
	Rat	3000 mg/kg

Components	Species	Test Results
Thawrox Treated Salt Liquid Additive (CAS Mixture)		
Acute		
Oral		
LD50	Rat	14930 mg/kg
Effects of acute exposure		
Eye contact	May cause irritation.	
Skin contact	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	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.		
Ecotoxicological data			
Components		Species	Test Results
Sodium chloride (CAS 7647-14-5)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	340.7 - 469.2 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4747 - 7824 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	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

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.

WHMIS status Not Controlled

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.

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 - No
 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
 Sodium chloride (CAS 7647-14-5) LISTED

US. Massachusetts RTK - Substance List
 Not regulated.

US. Pennsylvania RTK - Hazardous Substances
 Not regulated.

US. Rhode Island RTK
 Not regulated.

Inventory status

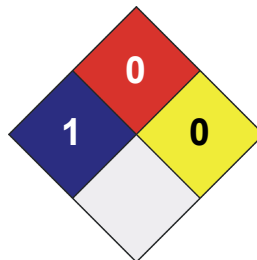
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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	A



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

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Other information

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