

1. Product and Company Identification

Product Name Sifto Safe Step Xtreme
CAS # Mixture
Product use De-icer
Manufacturer Sifto Canada Inc.
 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 1-800-996-6666

2. Hazards Identification

Emergency overview CAUTION
 EYE IRRITANT

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 a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects May be harmful to freshwater aquatic species and to plants that are not saline tolerant.

3. Composition / Information on Ingredients

| Ingredient(s) | CAS # | Percent |
|--------------------|------------|---------|
| Sodium chloride | 7647-14-5 | 40 - 70 |
| Potassium chloride | 7447-40-7 | 3 - 7 |
| Calcium chloride | 10043-52-4 | 15 - 40 |

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.

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. Wear safety glasses. 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 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. Oxides of sodium. |
| Explosion data | |
| Sensitivity to mechanical impact | Not available |
| Sensitivity to static discharge | Not available |

6. Accidental Release Measures

| | |
|----------------------------------|---|
| Personal precautions | Avoid contact with eyes. |
| Environmental precautions | Do not contaminate water. |
| Methods for containment | 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. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. |

7. Handling and Storage

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

8. Exposure Controls / Personal Protection

| Exposure limits | |
|------------------------|---|
| Ingredient(s) | Exposure Limits |
| Calcium chloride | ACGIH-TLV Not established OSHA-PEL Not established |
| Potassium chloride | 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, potassium chloride or calcium 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, potassium chloride or calcium 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.

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 | Blue / White |
| Form | Crystals |
| Odor | Odorless |
| Odor threshold | Not available |
| Physical state | Solid |
| pH | Not available |
| Melting point | 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, lower, % by volume | Not applicable |
| Flammability limits in air, upper, % by volume | Not applicable |
| Vapor pressure | Not available |
| Vapor density | Not available |
| Specific gravity | Not available |
| Octanol/water coefficient | Not available |
| Solubility (H2O) | Partially soluble |
| 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. |

11. Toxicological Information

Component analysis - LC50

| Ingredient(s) | LC50 |
|--------------------|-------------------|
| Calcium chloride | Not available |
| Potassium chloride | Not available |
| Sodium chloride | > 21000 mg/m3 rat |

Component analysis - Oral LD50

| Ingredient(s) | LD50 |
|--------------------|---|
| Calcium chloride | 1000 mg/kg rat; 1940 mg/kg mouse |
| Potassium chloride | 1500 mg/kg mouse; 2500 mg/kg guinea pig; 2600 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 | 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. | |
| Ecotoxicity - Freshwater Fish - Acute Toxicity Data | | |
| Calcium chloride | 10043-52-4 | 96 Hr LC50 Lepomis macrochirus: 10650 mg/L [static] |
| Ecotoxicity - Water Flea - Acute Toxicity Data | | |
| Calcium chloride | 10043-52-4 | 48 Hr EC50 Daphnia magna: 52 mg/L |
| 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 available | |
| Chemical fate information | Not available | |
| Other adverse effects | 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 Controlled

WHMIS classification Class D - Division 2B

WHMIS labeling



Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

US Federal regulations This product is 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 - Yes
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

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 name

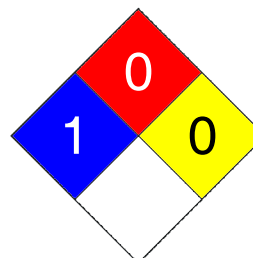
| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory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

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

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

11-Jan-2011

Effective date

01-Jan-2011

Expiry date

01-Jan-2014

Prepared by

Dell Tech Laboratories Ltd. (519) 858-5021

Other information

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