



1. Product and Company Identification

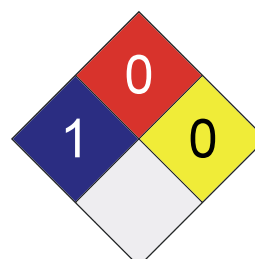
Product Name Safe Step Plus
CAS # Mixture
Product use De-icer.
Manufacturer North American Salt Company
 9900 West 109th Street, Suite 600
 Overland Park, KS 66210 US
 Phone: 913-344-9200

Supplier Compass Minerals International
 9900 West 109th Street, Suite 600
 Overland Park, KS 66210 US
 Phone: 913-344-9200
 Website: www.compassminerals.com

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
EYE AND SKIN 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.

3. Composition / Information on Ingredients

| Ingredient(s) | CAS # | Percent |
|---------------------------------|-----------|---------|
| Potassium chloride | 7447-40-7 | 7 - 13 |
| Sodium chloride | 7647-14-5 | 40 - 70 |
| Magnesium chloride, hexahydrate | 7791-18-6 | 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 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. 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.

Notes to physician Symptoms may be delayed.

General advice Not available

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. |

6. Accidental Release Measures

| | |
|--------------------------------|---|
| Personal precautions | 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. |
| Methods for containment | None necessary. |
| 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 | Avoid breathing dusts from this material. |
| Storage | Keep out of reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. |

8. Exposure Controls / Personal Protection

Exposure limits

| Ingredient(s) | Exposure Limits |
|---------------------------------|---|
| Magnesium chloride, hexahydrate | 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 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, potassium 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 & Chemical Properties

| | |
|---|-------------------|
| Appearance | Crystalline. |
| Color | White |
| Form | Crystalline. |
| Odor | Odorless. |
| Odor threshold | Not available |
| Physical state | Solid |
| pH | Not available |
| Melting point | Not available |
| Freezing point | Not available |
| Boiling point | Not applicable |
| Flash point | Not available |
| Evaporation rate | 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 |
| Auto-ignition temperature | Not available |
| Percent volatile | Not available |

10. Chemical Stability & Reactivity Information

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|---|---|
| Chemical stability | Stable. |
| Conditions to avoid | Do not mix with incompatible materials. |
| Incompatible materials | Reactive with oxidizing agents, acids, metals in presence of moisture. |
| Hazardous decomposition products | May include and are not limited to: Halogenated compounds. Hydrogen chloride. |
| Possibility of hazardous reactions | Hazardous polymerization does not occur. |

11. Toxicological Information

Component analysis - LC50

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

Component analysis - Oral LD50

| Ingredient(s) | LD50 |
|---------------------------------|---|
| Magnesium chloride, hexahydrate | 8100 mg/kg rat; 7600 mg/kg mouse |
| Potassium chloride | 2500 mg/kg guinea pig; 1500 mg/kg mouse; 2600 mg/kg rat |
| Sodium chloride | 3000 mg/kg rat |

Effects of acute exposure

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|-------------|-----------------------|
| 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 | Maybe 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 available |
| Mobility in environmental media | Not available |
| Chemical fate information | Not available |

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 |

14. Transport Information

| | |
|--|-----------------------------------|
| Department of Transportation (DOT) | Not regulated as dangerous goods. |
| Transportation of Dangerous Goods (TDG) | 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. |
| 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 Controlled
WHMIS classification Class D - Division 2B
WHMIS labeling



State regulations

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

Hydrated forms of magnesium chloride, such as MgCl₂·6H₂O or the hexahydrate form, are not typically listed on chemical inventories. The anhydrous form of magnesium chloride, 7786-30-3, is listed on the chemical inventories. Magnesium chloride hexahydrate is the combination of 7786-30-3 (magnesium chloride, MgCl₂) and 7732-18-5 (water, H₂O).

Sodium chloride, 7647-14-5, is listed on the chemical inventories.

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

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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