



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

|                     |   |
|---------------------|---|
| <b>Product Name</b> | <b>Sodium Chloride, Salt</b>  |
| <b>Product use</b>  | De-icer General industrial and water softening/conditioning purposes.   |
| <b>Manufacturer</b> | North American Salt Company<br>A Compass Minerals Company<br>9900 West 109th Street, Suite 100<br>Overland Park, KS 66210 US<br>Phone: 913-344-9200 |
| <b>CHEMTREC</b>     | 1-800-424-9300  |

## 2. Hazards Identification

|  |  |
|--|--|
| <b>Emergency overview</b>                  | CAUTION<br>May cause eye and skin irritation.  |
| <b>Potential short term health effects</b> |  |
| <b>Routes of exposure</b>                  | Eye, Skin contact, Inhalation, Ingestion.  |
| <b>Eyes</b>                                | May cause irritation.  |
| <b>Skin</b>                                | May cause irritation.  |
| <b>Inhalation</b>                          | Dusts of this product may cause irritation of the nose, throat, and respiratory tract.   |
| <b>Ingestion</b>                           | May cause stomach distress, nausea or vomiting.  |
| <b>Target organs</b>                       | Eyes. Skin. Respiratory system.  |
| <b>Chronic effects</b>                     | Prolonged or repeated exposure can cause drying, defatting and dermatitis.   |
| <b>Signs and symptoms</b>                  | Symptoms may include redness, edema, drying, defatting and cracking of the skin.<br>Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. |
| <b>OSHA Regulatory Status</b>              | This product is NOT known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.   |
| <b>Potential environmental effects</b>     | See section 12.  |

## 3. Composition / Information on Ingredients

| <b>Ingredient(s)</b> | <b>CAS #</b> | <b>Percent</b> |
|----------------------|--------------|----------------|
| Sodium chloride      | 7647-14-5    | 90 - 100       |

## 4. First Aid Measures

|                             |  |
|-----------------------------|--|
| <b>First aid procedures</b> |  |
| <b>Eye contact</b>          | Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists. |
| <b>Skin contact</b>         | Brush away excess of dry material. Flush with water. Obtain medical attention if irritation persists.                                |
| <b>Inhalation</b>           | If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.   |
| <b>Ingestion</b>            | Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.           |
| <b>Notes to physician</b>   | Symptoms may be delayed.   |
| <b>General advice</b>       | Avoid contact with eyes. Keep out of reach of children.  |

## 5. Fire Fighting Measures

|                                       |  |
|---------------------------------------|--|
| <b>Flammable properties</b>           | Not flammable by OSHA criteria. May be combustible at high temperatures. |
| <b>Extinguishing media</b>            |  |
| <b>Suitable extinguishing media</b>   | Treat for surrounding material.  |
| <b>Unsuitable extinguishing media</b> | 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 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 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** 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** 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   |
|-----------------|---|
| Sodium chloride | <b>ACGIH-TLV</b><br>Not established<br><b>OSHA-PEL</b><br>Not established |

**Engineering controls**

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.

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.

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

|   |                                  |
|---|----------------------------------|
| <b>Appearance</b>                                     | Crystalline.                     |
| <b>Color</b>  | White                            |
| <b>Form</b>   | Crystals                         |
| <b>Odor</b>   | Odorless                         |
| <b>Odor threshold</b>                                 | Not available                    |
| <b>Physical state</b>                                 | Solid                            |
| <b>pH</b>   | 6 - 8 (Neutral)                  |
| <b>Melting point</b>                                  | 1473.62 °F (800.9 °C)            |
| <b>Freezing point</b>                                 | Not available                    |
| <b>Boiling point</b>                                  | 2575.40 °F (1413 °C)             |
| <b>Pour point</b>                                     | Not available                    |
| <b>Evaporation rate</b>                               | Not available                    |
| <b>Flash point</b>                                    | Not available                    |
| <b>Auto-ignition temperature</b>                      | Not available                    |
| <b>Flammability limits in air, lower, % by volume</b> | Not applicable                   |
| <b>Flammability limits in air, upper, % by volume</b> | Not applicable                   |
| <b>Vapor pressure</b>                                 | 0.1 KPa (1 MmHg) @ 865°C         |
| <b>Vapor density</b>                                  | Not applicable                   |
| <b>Specific gravity</b>                               | 2.17 (H <sub>2</sub> O = 1)      |
| <b>Relative density</b>                               | 2.17 g/cm <sup>3</sup>           |
| <b>Octanol/water coefficient</b>                      | Not available                    |
| <b>Solubility (H<sub>2</sub>O)</b>                    | 36G/100g H <sub>2</sub> O @ 20°C |
| <b>Viscosity</b>                                      | Not applicable                   |
| <b>Percent volatile</b>                               | 0 % w/w                          |
| <b>Molecular weight</b>                               | 58.4400 g/mole                   |
| <b>Molecular formula</b>                              | NaCl                             |
| <b>Viscosity</b>                                      | Not applicable                   |

## 10. Stability and Reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                         | Reactive with oxidizing agents, acids, lithium, bromine trifluoride.           |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.                                       |
| <b>Chemical stability</b>                 | Stable under recommended storage conditions.                                   |
| <b>Conditions to avoid</b>                | Do not mix with incompatible materials.  |
| <b>Incompatible materials</b>             | Acids. Oxidizers.  |
| <b>Hazardous decomposition products</b>   | May include and are not limited to: Hydrogen chloride. Chlorine. sodium oxides |

## 11. Toxicological Information

### Component analysis - LC50

| <b>Ingredient(s)</b> | <b>LC50</b>                   |
|----------------------|-------------------------------|
| Sodium chloride      | > 21000 mg/m <sup>3</sup> rat |

### Component analysis - Oral LD50

| <b>Ingredient(s)</b> | <b>LD50</b>                      |
|----------------------|----------------------------------|
| Sodium chloride      | 3000 mg/kg rat; 4000 mg/kg mouse |

### Effects of acute exposure

|             |                       |
|-------------|-----------------------|
| <b>Eye</b>  | May cause irritation. |
| <b>Skin</b> | May cause irritation. |

|   |  |
|---|--|
| <b>Inhalation</b>                                   | Dusts of this product may cause irritation of the nose, throat, and respiratory tract. |
| <b>Ingestion</b>                                    | May cause stomach distress, nausea or vomiting.  |
| <b>Sensitization</b>                                | Not classified or listed by IARC, NTP, OSHA and ACGIH.                                 |
| <b>Chronic effects</b>                              | Not classified or listed by IARC, NTP, OSHA and ACGIH.                                 |
| <b>Carcinogenicity</b>                              | Not classified or listed by IARC, NTP, OSHA and ACGIH.                                 |
| <b>Mutagenicity</b>                                 | Not classified or listed by IARC, NTP, OSHA and ACGIH.                                 |
| <b>Reproductive effects</b>                         | Not classified or listed by IARC, NTP, OSHA and ACGIH.                                 |
| <b>Teratogenicity</b>                               | Not classified or listed by IARC, NTP, OSHA and ACGIH.                                 |
| <b>Name of Toxicologically Synergistic Products</b> | Not available  |

## 12. Ecological Information

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

## 13. Disposal Considerations

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

United States &amp; Puerto Rico

**Inventory name**

Toxic Substances Control Act (TSCA) Inventory

**On inventory (yes/no)\***

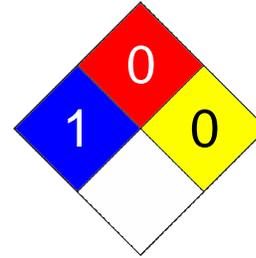
Yes

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

**16. Other Information**

| LEGEND<br>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.

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**Other information**

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