US SALT LLC SAFETY DATA SHEET

## 1. Product and Company Identification

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|---|---|
| **Product Identifier** | Sodium Chloride (Salt) – Untreated |
| **Other means of identification** | |
| **Synonyms** | Superior General Purpose Salt<br>Superior Alpha Purified Salt |
| **Recommended Use(s)** | Food or animal feed (agricultural) as well as several industrial applications including deicing or water treatment. |
| **Recommended Restrictions** | None Known |
| **Manufacturer** | US Salt LLC<br>3580 Salt Point Road<br>Watkins Glen, NY 14891<br>Phone: 607-535-2721 |
| **Emergency Telephone Number** | CHEMTREC (800) 424-9300 |

## 2. Hazard(s) Identification

| | |
|---|---|
| **Physical Hazards** | Not Classified |
| **Health Hazards** | Not Classified |
| **Environmental Hazards** | Not Classified |
| **OSHA Defined Hazards** | Not Classified |
| **Label Elements** | |
| **Hazard Symbol** | None |
| **Signal Word** | None |
| **Hazard Statement** | The product does not meet the criteria for classification |
| **Precautionary Statement** | |
| **Prevention** | Observe good industrial hygiene practices |
| **Response** | Wash hands after handling |
| **Storage** | Store away from incompatible materials |
| **Disposal** | Dispose of waste and residues in accordance with local authority requirements |
| **Hazard(s) not otherwise Classified (HNOC)** | None Known |

## 3. Composition / Information on Ingredients

**Salt and/or Salt Mixtures**

| Chemical Name | CAS # | % |
|---|---|---|
| Sodium Chloride | 7647-14-5 | 100 |

GRAS Substance (Generally Recognized as Safe)

## 4. First Aid Measures

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| **Inhalation** | Avoid breathing dust. If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist. |
| **Skin Contact** | Wash skin with soap and water. Get medical attention if irritation develops and persists. |
| **Eye Contact** | Rinse with water. Get medical attention if irritation develops and persists. |
| **Ingestion** | Give one or two glasses of water if person is alert and able to swallow. Get medical attention if symptoms occur. |
| **Most important symptoms/effects, acute and delayed** | Direct contact with eyes may cause temporary irritation. |
| **Indication of immediate medical attention and special Treatment needed** | Treat symptomatically |

## 5. Fire Fighting Measures

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| **Suitable extinguishing media** | Salt and salt mixtures are non-combustible |
| **Unsuitable extinguishing media** | Not Applicable |
| **Specific hazards arising from the chemical** | During fire, gases hazardous to health may be formed. |
| **Special protective equipment and precautions for firefighters** | Use appropriate firefighting PPE as a general precaution. |
| **Fire-fighting equipment/instructions** | Salt is not combustible and is thus not the material of concern for firefighting equipment or methods. |
| **Specific methods** | In the event of a fire, equipment and methods that are consistent with the combusting material should be used. |
| **General fire hazards** | No unusual fire or explosion hazards noted. |

## 6. Accidental Release Measures

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| **Personal precautions, protective equipment and emergency procedures** | Keep unnecessary personnel away. Avoid generation and spreading of dust. Avoid inhalation of dust and contact with skin and eyes. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS. |
| **Methods and materials for containment and cleaning up** | Stop the flow of material, if this is without risk. If sweeping of a contaminated area is necessary, use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Avoid release to the environment. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. |
| **Environmental precautions** | Avoid discharge into storm drains or sanitary sewers, groundwater or soil. |

## 7. Handling and Storage

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| **Precautions for safe handling** | Use work methods which minimize dust production. Provide appropriate exhaust ventilation at places where dust is formed. Avoid inhalation of dust and contact with skin and eyes. Wash thoroughly after handling. Keep away from strong acids. Practice good housekeeping. |
| **Conditions for safe storage, including any incompatibilities** | Store in closed original container in a dry place. Store away from incompatible materials (see section 10 of the SDS). Becomes hygroscopic at 70-75% relative humidity. Avoid humid or wet conditions as product will cake and become hard. |

## 8. Exposure Controls / Personal Protection

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| **Occupational exposure limits** | No exposures limits noted for ingredients(s). |
| **Biological limit values** | No biological exposure limits noted for the ingredient(s). |
| **Appropriate 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.<br><br>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.<br><br>Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. |

**Individual protection measures, such as personal protective equipment**

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| **Eye/face protection** | Wear safety glasses with side shields |
| **Skin protection** | |
| **Hand protection** | If there is constant skin contact, rubber gloves are recommended. |
| **Other** | Wear suitable protective clothing. |

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| **Respiratory protection** | If engineering controls do not maintain airborne concentrations below recommended exposure imits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134. |
| **Thermal hazards** | Wear appropriate thermal protective clothing, when necessary. |
| **General hygiene considerations** | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

## 9. Physical and Chemical Properties

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| **Appearance** | White crystalline solid |
| **Physical State** | Solid |
| **Form** | Crystalline Solid |
| **Color** | White |
| **Odor** | Halogen odor |
| **Odor Threshold** | Not applicable |
| **pH in aqueous solution** | 4-9 |
| **Melting point/freezing point** | 1473.8 °F (801 °C) |
| Initial boiling point and boiling **range** | 2669 °F (1465 °C) (760 mm Hg) |
| **Flash Point** | Not applicable |
| **Evaporation Rate** | Not applicable |
| **Flammability (solid, gas)** | Not applicable |
| **Upper/lower flammability or explosive limits** | |
| **Flammability limit – lower (%)** | Not applicable |
| **Flammability limit – upper (%)** | Not applicable |
| **Explosive limit – lower (%)** | Not applicable |
| **Explosive limit – upper (%)** | Not applicable |
| **Vapor pressure** | 2.4 mm Hg (1376.6 ℉ (747 ℃)) |
| **Vapor density** | Not applicable |
| **Relative density** | 2.16 ($H_2O$ = 1) |
| **Solubility(ies)** | |
| **Solubility (water)** | 26.4% |
| **Partition coefficient (n-octanol/water)** | Not applicable |
| **Auto-ignition temperature** | Not applicable |
| **Decomposition temperature** | Not applicable |
| **Viscosity** | Not applicable |
| **Other information** | |
| **Bulk density** | 53 – 83 lb/ft$^3$ |
| **Molecular formula** | NaCl |
| **Molecular weight** | 58.44 |

## 10. Stability and Reactivity

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| **Reactivity** | The product is stable and non-reactive under normal conditions of storage and transport. |
| **Chemical stability** | Material is stable under normal conditions. |
| **Possibility of hazardous reactions** | No dangerous reaction known under conditions of normal use. |
| **Conditions to avoid** | Contact with incompatible materials, i.e. strong oxidizing agents. |
| **Incompatible materials** | Strong oxidizing agents, strong acids. Becomes corrosive to metals when wet. |
| **Hazardous decomposition products** | Chlorine gas, hydrogen chloride, oxides of sodium. |

## 11. Toxicological Information

**Information on likely routes of exposure**

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|---|---|
| **Ingestion** | Expected to be low ingestion hazard |
| **Inhalation** | High concentrations of dust may irritate throat and respiratory system and cause coughing. |
| **Skin contact** | Dust may irritate skin. May cause irritation through mechanical abrasion. |
| **Eye contact** | Direct contact with eyes may cause temporary irritation. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | Dust may cause eye, skin and respiratory tract irritation. Exposed individuals may experience eye Tearing, redness and discomfort. |

**Information on toxicological effects**

**Acute toxicity** Ingestion of dusts generated during working operations may cause nausea and vomiting

| Product | Species | Test Results |
|---|---|---|
| Sodium Chloride (CAS 7647-14-5) | | |
| **Acute** | | |
| *Oral* | | |
| LD50 | Mouse | 4000 mg/kg |
| | Rat | 3000 mg/kg |
| Other | | |
| LD50 | Mouse | 2602 mg/kg |

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|---|---|
| **Skin corrosion/irritation** | Prolonged skin contact may cause temporary irritation |
| **Serious eye damage/eye irritation** | Dust in the eyes will cause irritation |
| **Respiratory or skin sensitization** | |
| **Respiratory sensitization** | Not available |
| **Skin sensitization** | This product is not expected to cause skin sensitization |
| **Germ cell mutagenicity** | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic |
| **Carcinogenicity** | This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA |
| **Reproductive toxicity** | This product is not expected to cause reproductive or developmental effects. |
| **Specific target organ toxicity - single exposure** | Not classified |
| **Specific target organ toxicity - repeated exposure** | Not classified |
| **Aspiration Hazard** | Not classified |
| **Chronic effects** | Not classified |

## 12. Ecological Information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components | | Species | Test Results |
|---|---|---|---|
| Sodium Chloride (CAS 7647-14-5) | | | |
| **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 |

| | |
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| **Persistence and degradability** | No data is available on the degradability of this product |
| **Bioaccumulative potential** | No data available |
| **Mobility in soil** | No data available |
| **Mobility in general** | No data available |
| **Other Adverse effects** | None known |

## 13. Disposal Considerations

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|---|---|
| **Disposal instructions** | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. |
| **Local disposal regulations** | Dispose in accordance with all applicable regulations |
| **Hazardous waste code** | The waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| **Waste from residues / unused products** | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see Disposal Instructions). |
| **Contaminated packaging** | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since Emptied containers may retain product residue, follow label warnings even after container is emptied. |

## 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.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

| | |
|---|---|
| **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** | Not Applicable |

## 15. Regulatory Information

**US Federal Regulations**

All components are on the U.S. EPA TSCA Inventory List
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

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**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

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

| | |
|---|---|
| **Hazard Categories** | Immediate Hazard – No<br>Delayed Hazard – No<br>Fire Hazard – No<br>Pressure Hazard – No<br>Reactivity Hazard – No |
| **SARA 302 Extremely Hazardous Substance** | No |
| **SARA 311/312 Hazardous Chemical** | No |
| **SARA 313 (TRI reporting)** | Not regulated |

**Other federal regulations**

| | |
|---|---|
| **Safe Drinking Water Act (SDWA)** | Not regulated |

**US state regulations**

**US Massachusetts RTK – Substance List**
Not regulated

**US New Jersey Worker and Community Right-to Know Act**
Not listed

**US Pennsylvania Worker and Community Right-to-Know Law**
Not listed

**US Rhode Island RTK**
Not regulated

**US California Proposition 65**
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**US – California Proposition 65 – Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

| Country(s) or region | Inventory name | On inventory (Yes/No)* |
|---|---|---|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ENCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or are exempt from listing on the inventory administered by the governing country(s)

## 16. Other Information, including date of preparation or last revision

**Issue Date** 01-March-2015

**Revision Date** -

**Version #** 01

**Legend**

| | |
|---|---|
| Severe | 4 |
| Serious | 3 |
| Moderate | 2 |
| Slight | 1 |
| Minimal | 0 |

| | | |
|---|---|---|
| **HMIS Ratings** | Health | 1 |
| | Flammability | 0 |
| | Physical Hazard | 0 |
| | Personal protection | A |
| **NFPA Ratings** | Health | 1 |
| | Flammability | 0 |
| | Reactivity | 0 |

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