



Eastern Salt Company, Inc.

MATERIAL SAFETY DATA SHEETS

1. PRODUCT AND COMPANY INFORMATION

Common Product Names: Salt, Road Salt, De-Icing Salt
Chemical Family: Alkali Metal/Halide
Chemical Name: Sodium Chloride
CAS No.: 7647-14-5
Molecular Weight: 58.44
Formula: NaCl

Supplier Name and Address: Eastern Salt Company, Inc.
134 Middle Street, Suite 210
Lowell, MA 01852

2. COMPOSITION/INFORMATION ON INGREDIENTS

Visual Appearance: White solid of small, pebble-sized crystals

Ingredients: Sodium Chloride concentrated from 95.99 to 99.99

Sodium Ferrocyanide Decahydrate (CAS No. 13601-19-9) concentrated from 0.0050 to 0.0100 is added at the mine or the load port as an anti-caking additive to keep road salt free flowing through spreaders. Also known as Yellow Prussiate of Soda or YPS. Approved by FDA as a food additive.

3. HAZARDS IDENTIFICATION

Entry: Ingestion, skin or eye contact, inhalation

Eye: May cause eye irritation with burning or tearing

Skin: May irritate damaged skin. Extended contact with large amount of road salt may also irritate skin.

Acute Inhalation: May irritate nose, throat or respiratory tract.

Chronic Inhalation: No Information Available

Ingestion: Although nearly identical to table salt, road salt is not intended for ingestion. As with all salts, large amounts may cause vomiting or other gastrointestinal discomfort. Dehydration and congestion can occur in internal organs from large or continued exposure. Ingestion of a large amount of salt should be treated by drinking large amounts of water or milk.

Carcinogenicity: No Listings Found

Other: In cases of hypertension, ingestion may contribute to elevated blood pressure. Road salt not intended for ingestion.



4. FIRST AID MEASURES

- Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Lift upper and lower eyelids occasionally. Get medical attention if irritation persists.
- Skin Contact:** Flush skin with soap and water for 15 minutes. Remove clothing and shoes as needed. Get medical attention if irritation persists.
- Ingestion:** If large amounts are swallowed, give water to drink and seek medical attention. Milk has also been reported as treatment.
- Inhalation:** Provide fresh air immediately. Get medical attention if any breathing difficulty occurs.

5. FIRE FIGHTING METHODS

- Fire:** Road salt is not flammable.
- Explosion:** Road salt is not an explosion hazard.
- Fire Fighting:** N/A to road salt itself. Use any method suitable for extinguishing surrounding fire. If water is used to extinguish a fire near road salt in a freshwater area, attempt to boom the area and collect water containing salt if safety situation permits. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

- Spills/Leaks:** Vacuum or sweep material into a suitable disposal container. Cleanup spills immediately observing proper precautions with respect to protective equipment or clothing if needed. Avoid discharge to water supply areas or sanitary sewer systems.

7. HANDLING AND STORAGE

- Storage:** Store in cool, dry, ventilated area when available. Store on impermeable surface and avoid leaching or loss to ground. Take precautions to avoid runoff to water supply areas or sanitary sewer systems.
- Handling:** Use with adequate ventilation in enclosed spaces. Minimize dust generation and accumulation of dust caused by repeated handling. Road salt is hygroscopic (absorbs water from the atmosphere) and can cake and become hard. Avoid contact with strong acids. Avoid contact with the eyes, skin and clothing. Do not ingest or inhale.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

- Exposure Limits:** None established. Airborne salt is commonly found in the coastal environment and several miles inland.
- Eyes:** Protection generally not required. Use goggles or eyeglasses if area is dusty. Road salt is typically a coarse, pebble-sized grade.
- OSHA PEL:** None listed.
- Skin:** Protection generally not required. Protective clothing may be used in dusty areas.
- Respirators:** NIOSH and MSHA approved air purifying dust or mist respirator as needed.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	White, small-pebble-sized solid.
Appearance:	White or with light color from trace minerals, or colorless.
Odor:	None
pH:	6.7 to 10.0
Vapor Pressure:	1.0 @ 865°C. (1,589°F.)
Vapor Density:	No information found.
Evaporation Rate:	No information found.
Boiling Point:	2,575°F
Melting Point:	1,474°F
Flash Point:	Not applicable
Solubility:	36g/100cc water @ 20°C. (68°F)
Specific Gravity:	2.16

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under ordinary conditions. Hygroscopic (absorbs water).
Incompatibility:	Avoid contact with strong acids. Reacts with most non-noble metals such as iron and steel, building materials, bromine, trifluoride, lithium, especially when wet. Potentially explosive reaction with dichloromaleic anhydride and urea. Electrolysis of mixtures with nitrogen compounds may form explosive nitrogen trichloride.
Decomposition:	When heated above 1,474°F, may evolve chlorine gas or fumes of sodium oxide.

11. TOXICOLOGICAL INFORMATION

Oral rat LD50:	3,000 mg/kg
Inhalation rat LC50:	>42gm/m ³ /1H
Skin rabbit LD50:	>10gm/kg. Investigated as a mutagen, reproductive effector.
Carcinogenicity:	Not listed by ACGIH, IARC, NIOSH, NTP or OSHA.
Epidemiology:	No information reported.
Neurotoxicity:	No information reported.
Mutagenicity:	See actual entry in RTECS for complete information.

12. ECOLOGICAL INFORMATION

Environmental Fate:	Road salt can move through the environment in the salt form or as dissociated ions. Road salt goes into solution in water. In aquatic systems, chloride ions separate from corresponding cations (sodium, potassium calcium, etc.) The chloride ions can pass through soil and water. In soil, the positively charged chloride ions tend to bond with negatively charged soil surfaces. Sodium cations have low reactivity in water. With respect to the anti-caking additive, the ferrocyanide is a complex anion with a very strong bond between the central iron atom and the octahedral configuration of cyanide ligands. Dissociated anions react readily with iron to form ferric ferrocyanide, a very stable, nontoxic, relatively immobile compound. The anion is subject to decomposition if it is in solution and subject to very bright, direct sunlight, but released cyanide recombines rapidly with numerous transition metals to form more stable, less toxic materials.
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Environmental Toxicity: Care should be taken to reduce release of road salts in freshwater areas. Dispersal and calibration restrictions on spreaders should be followed.



13. DISPOSAL CONSIDERATIONS

Save for recovery or recycling. Processing, use or contamination may change the waste management alternatives. Federal, state and local disposal regulations may vary.

RCRA P-Series: None listed

RCRA U-Series: None listed

14. TRANSPORT INFORMATION

Transport of salt is not regulated. When transported by truck it is recommended that the road salt cargo in the bed of the truck be covered with a tarp or screen.

15. REGULATORY INFORMATION

TSCA: CAS# 7647-14-5 is listed on the TSCA inventory. Sodium chloride is not listed on the Health & Safety Reporting List, the Chemical Test Rule, Section 12b, or the Significant New Use Rule. CAS# 13601-19-9 is listed on the TSCA Inventory.

SARA: CAS#74=647-14-5 is codified as acute. No RQ, TPQ, or reportability under 313 is found.

Clean Air Act: Sodium Chloride does not contain any hazardous air pollutants or ozone depleters.

Clean Water Act: Sodium Chloride is not listed as a hazardous substance, as a priority pollutant, or as a toxic pollutant under this Act.

OSHA: Sodium Chloride is not considered highly hazardous by OSHA. State or International classifications should be consulted by the user.

16. ADDITIONAL INFORMATION

MSDS Creation Date: September 6, 2011

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