Deicing Salt: Safety Data Sheet

Section 1: Identification

- Product identifier: **Sodium Chloride deicing salt with calcium chloride additive**
- Synonyms: Sodium chloride, rock salt, MELTEB, MELTCC, MELTESB, BlueHeat, Frost Bite, Keep It Green,
- Recommended use: Deicing and anti-icing agent, general industrial and commercial ice-melting applications.
- Restrictions on use: Not for food, pharmaceutical, or medical use; avoid use in applications sensitive to chlorides or increased salinity.
- Supplier details:
    - Company name: All Season Power LLC
    - Address: 794 School House Rd New Castle DE 19720
    - Phone: 1-866-255-9723
- Preparation / revision date: 02/16/2026

Section 2: Hazard(s) identification

Mixture classification (GHS / OSHA HCS 2012):

- Overall GHS classification of mixture (as typically formulated deicer):
    - Not classified as a hazardous mixture for physical hazards.
    - Health hazards driven primarily by calcium chloride (irritation) at its use level; overall mixture generally treated as causing eye irritation and possible GI upset if swallowed.

Typical conservative classification for mixture:

- Classification:
    - Eye irritation, Category 2 (due to calcium chloride and dust).
- Signal word: Warning.
- Hazard statements (example for mixture):

- Causes serious eye irritation.
- May be harmful if swallowed in large amounts.
- May cause irritation to skin and respiratory tract as dust.

- Precautionary statements:
  - Avoid breathing dust.
  - Wash hands and exposed skin thoroughly after handling.
  - Wear eye protection such as safety glasses.
  - Do not eat, drink or smoke when using this product.
  - If in eyes: Rinse cautiously with water for several minutes; remove contact lenses if present and easy to do; continue rinsing.
  - If swallowed: Rinse mouth; drink water; call a doctor if you feel unwell.

Other hazards:

- Dust may cause mechanical irritation of eyes, skin, and respiratory tract.
- Large ingestion may cause abdominal discomfort, vomiting, and disturbance of fluid/electrolyte balance (due to sodium and calcium salts).
- Dye is present at less than 0.001% and does not change the hazard class; treat as a trace constituent.

Section 3: Composition/information on ingredients

Mixture:

Component	CAS	Approx. % (w/w)	GHS classification (typical)
Sodium chloride	7647-14-5	Balance (major component)	Not classified; nuisance dust irritation
Calcium chloride	10043-52-4	1–10%	Acute oral toxicity Cat. 4, Eye irrit. Cat. 2 (as neat material)
Organic dye (e.g. Acid Blue 9)	3844-45-9	< 0.001%	Not classified at this very low concentration

No other hazardous ingredients are present at reportable levels based on current knowledge.

Section 4: First-aid measures

- Inhalation: Remove to fresh air; blow nose to remove dust; seek medical attention if irritation, coughing, or difficulty breathing persists.
- Skin contact: Brush off loose material; wash with soap and water; remove contaminated clothing; seek medical attention if irritation or rash occurs.
- Eye contact: Rinse cautiously with water for at least 15 minutes; remove contact lenses if present and easy to do; continue rinsing; seek medical attention if irritation persists or vision changes.
- Ingestion: Rinse mouth and give water to drink; do not induce vomiting unless directed by medical personnel; large doses may cause vomiting and GI upset—seek medical attention if large amounts are swallowed or symptoms occur.
- Most important symptoms/effects: Eye irritation; possible skin and respiratory irritation; GI discomfort after large ingestion.
- Indication of immediate medical attention: Persistent eye irritation, breathing difficulty, or significant ingestion.

Section 5: Fire-fighting measures

- Suitable extinguishing media: Product is non-combustible; use media suitable for surrounding fire (water spray, foam, dry chemical, CO_2).
- Specific hazards: Not flammable; at very high temperatures product may decompose, releasing hydrogen chloride/chlorine and metal oxides.
- Protective equipment: Fire-fighters should wear self-contained breathing apparatus and full protective gear.

Section 6: Accidental release measures

- Personal precautions: Avoid generating dust; avoid contact with eyes and prolonged skin contact; wear safety glasses and gloves.
- Environmental precautions: Prevent large quantities from entering surface water or groundwater because of salinity effects.

- Methods for cleanup: Sweep or shovel up; avoid dust generation; place in suitable container for reuse or disposal; wash spill area with water while avoiding discharge of strong brine to sensitive water bodies or storm drains where restricted.

Section 7: Handling and storage

- Handling: Avoid dust formation and inhalation; avoid contact with eyes; use good industrial hygiene practices; do not eat, drink, or smoke while handling.
- Storage: Store in a cool, dry, well-ventilated area; keep container tightly closed; protect from moisture; keep away from strong acids, strong oxidizing agents, and reactive metals.

Section 8: Exposure controls/personal protection

- Exposure limits (nuisance dust guidance for mixture):
  - Inhalable dust (particulates not otherwise regulated): 10 mg/m^3 (typical guideline).
- Engineering controls: Provide general or local exhaust ventilation in areas where dust may be generated.
- Personal protective equipment:
  - Eye/face protection: Safety glasses with side shields or goggles where dust may contact eyes.
  - Skin protection: Work gloves and suitable work clothing to minimize skin contact.
  - Respiratory protection: Not normally required; if dust levels are high or irritation occurs, use a NIOSH-approved particulate respirator.
  - Hygiene: Wash hands and exposed skin after handling; launder contaminated clothing before reuse.

Section 9: Physical and chemical properties

- Appearance: White to off-white granular/crystalline solid; may appear lightly colored due to dye.
- Odor: None.
- pH: Slightly acidic to neutral for typical brine solution (e.g. 5–9 for 5% solution).

- Melting point: Above 600 °C (mixture); sodium chloride melts at about 801 °C.
- Boiling point / decomposition: Decomposes at high temperature with release of hydrogen chloride/chlorine and metal oxides.
- Flash point: Not applicable (inorganic non-combustible solid).
- Flammability: Non-flammable.
- Vapor pressure: Negligible at ambient temperature.
- Density: Approx. 2–2.2 (water = 1), depending on blend.
- Solubility: Highly soluble in water.
- Partition coefficient n-octanol/water: Not relevant (inorganic salts dominate).
- Auto-ignition temperature: Not applicable.
- Viscosity: Not applicable (solid).

Section 10: Stability and reactivity

- Reactivity: Not reactive under normal conditions.
- Chemical stability: Stable under recommended storage and handling conditions.
- Possibility of hazardous reactions: No hazardous polymerization expected.
- Conditions to avoid: Excessive heat, moisture, dust formation, and contact with incompatible materials.
- Incompatible materials: Strong acids; strong oxidizing agents; reactive metals (e.g. aluminum in wet conditions, lithium, bromine trifluoride, etc.).
- Hazardous decomposition products: Hydrogen chloride, chlorine, and metal oxides under high-temperature decomposition.

Section 11: Toxicological information

For mixture (rock salt with calcium chloride and trace dye):

- Likely routes of exposure: Inhalation of dust, skin contact, eye contact, ingestion.

- Acute effects:
    - Inhalation: May cause irritation of nose, throat, and respiratory tract.
    - Skin contact: Prolonged or repeated contact may cause dryness or irritation; calcium chloride solutions can be more irritating if moist.
    - Eye contact: Causes irritation; severe dust or solution splashes can cause significant discomfort and redness.
    - Ingestion: Large amounts may cause nausea, vomiting, and abdominal discomfort; high intake of sodium and calcium may affect fluid and electrolyte balance in susceptible individuals.
- Sensitization: Not expected to cause respiratory or skin sensitization.
- Carcinogenicity / Mutagenicity / Reproductive toxicity: None of the components (sodium chloride, calcium chloride, dye at <0.001%) are classified as carcinogens or reproductive toxins at the concentrations present.
- STOT (single/repeated): Not classified; repeated over-exposure to high levels of dust or concentrated brine may aggravate existing respiratory or skin conditions.
- Aspiration hazard: Not an aspiration hazard (solid).

Section 12: Ecological information

- Ecotoxicity: Large releases may increase salinity in receiving waters and soil, which can be harmful to aquatic life and vegetation; calcium and sodium chlorides are not acutely toxic at low environmental concentrations but can stress organisms at higher salinity.
- Persistence and degradability: Inorganic salts; not biodegradable; remain as ions in water and soil.
- Bioaccumulative potential: Low; sodium, calcium, and chloride ions are not expected to bioaccumulate.
- Mobility in soil: Highly mobile in water; may migrate into groundwater.
- Other adverse effects: None known beyond salinity effects when applied or released in large quantities.

Section 13: Disposal considerations

- Product: Where allowed, material may be used for its intended deicing purpose; otherwise, dispose of as non-hazardous inorganic solid waste in accordance with local, regional, national, and international regulations.
- Contaminated packaging: Empty containers may contain residues; rinse and recycle where facilities exist, or dispose according to regulations.

Section 14: Transport information

- UN number: Not regulated.
- UN proper shipping name: Not regulated as dangerous goods.
- Transport hazard class(es): Not applicable.
- Packing group: Not applicable.
- Environmental hazards: Not classified as marine pollutant; however, large releases should be avoided near waterways.
- Special precautions: Avoid generation and spread of dust; prevent large releases to the environment.

Section 15: Regulatory information

- OSHA: Mixture contains components that can cause irritation but is typically not classified as a hazardous mixture at common deicing concentrations; verify classification in your jurisdiction.
- SARA 311/312: May be considered an acute health hazard mixture due to calcium chloride irritation potential; confirm based on your final composition.
- SARA 313 / CERCLA: No reportable components expected at typical deicing levels; confirm versus your specific formula and local regulations.
- TSCA: All inorganic components are generally listed or exempt; verify each component in your final product.
- Other: Check state/provincial “Right-to-Know” and any dye-related listing requirements, though dye is at <0.001%.

Section 16: Other information

- HMIS (suggested for mixture):
    - Health: 1 (irritation)
    - Flammability: 0
    - Physical hazard: 0
    - PPE: B (safety glasses, gloves) or as determined by your program.
- NFPA (suggested):
    - Health: 1
    - Flammability: 0
    - Reactivity: 0
- Revision date: 2/16/2016