1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: ClearLane® enhanced deicer
Chemical Name: Sodium Chloride mixed with Magnesium Chloride
Formula: NaCl, MgCl$_2$, (HOCH$_2$CH$_2$)$_3$N
Molecular Weight: NaCl = 58.44, MgCl$_2$ = 95.22, (HOCH$_2$CH$_2$)$_3$N = 149.19

Manufacturer Name & Address: Cargill Deicing Technology
24950 Country Club Blvd., Ste 450
North Olmsted, OH 44070
800-600-7258 www.cargill.com

Emergency Telephone Contact Number: CHEMTREC (800) 424-9300 24 hours a day

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredients(*)</th>
<th>% weight</th>
<th>CAS No.</th>
<th>OSHA PEL</th>
<th>OSHA STEL</th>
<th>ACGIH TWA</th>
<th>ACGIH STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium chloride</td>
<td>91.0-96.0</td>
<td>7647-14-5</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Water</td>
<td>2.6-4.0</td>
<td>7732-18-5</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Magnesium Chloride</td>
<td>0.87-1.40</td>
<td>7786-30-3</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Physical description: Green damp crystalline solid
Odor: None

Potential Health Effects: CAUTION! Causes eye irritation. Dusts may cause respiratory tract irritation. Ingestion may cause nausea and vomiting. Prolonged contact may cause skin irritation. Personnel responding to a spill of this material should wear appropriate personal protective equipment.

Fire Hazards: None.

NFPA RATING: Health - 1  Flammability - 0  Reactivity - 0  Special-NDA
4. FIRST AID MEASURES

**Skin Contact:** Remove clothing from affected area. Wash affected area with mild soap and water. Seek medical attention if irritation develops.

**Ingestion:** Rinse mouth and drink some water. Never give anything to an unconscious person. Do not induce vomiting unless directed to do so by a physician or poison center. See medical attention if irritation develops.

**Eye Contact:** Immediately flush with plenty of water. Remove contact lenses (if easy to do) and continue flushing for at least 15 minutes. Seek medical attention if irritation develops.

**Inhalation:** If affected, remove to fresh air. Seek medical attention if breathing becomes difficult.

5. FIRE AND MEASURES

**Extinguishing media:** Use extinguishing media suitable for surrounding fire

**Flashpoint:** Non-flammable. Will not burn under normal conditions.

**Protective Equipment:** Use NIOSH/MSHA approved SCBA and full bunker or turn-out gear.

**Unusual fire and explosion hazards:** None known.

6. ACCIDENTAL RELEASE MEASURES

Extinguish all ignition sources immediately. Do not attempt to clean up chemical spills without appropriate personal protective equipment (see section 8). Recover usable product. Vacuum or sweep into containers for disposal at an approved facility such as a municipal landfill or land application site. Prevent entry into waterways, sewers, basements, or confined areas. See Section 13 for information on the disposal of recovered material.

7. HANDLING AND STORAGE

**Handling:** Avoid eye contact. Use with appropriate personal protective equipment (see Section 8). Becomes hygroscopic at 75% relative humidity.

**Storage:** Avoid humid or wet conditions as product will cake and become hard. Store away from incompatible materials (see Section 10). Use with proper personal protective equipment (see Section 8). Keep out of reach of children. Do not reuse container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Use a combination of local exhaust and general dilution/ventilation to control exposures.

If that is not feasible, see recommendations under “Respiratory protection.”

**Skin/Hands:** Wear gloves. Contact glove manufacturer for additional information.

**Eye Protection:** Safety glasses or chemical goggles should be worn in dusty areas.
**Respiratory Protection:** NIOSH approved respirator is needed if area is very dusty. Seek professional advice prior to respirator selection or use. Follow OSHA respirator regulations (29 CFR 1910.134). Use a positive pressure air supplied respirator if there is a potential for an uncontrolled release, exposure levels are not known, or under any other circumstances where air purifying respirators may not provide adequate protection.

9. **PHYSICAL AND CHEMICAL PARAMETERS**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Green</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Physical state</td>
<td>Damp crystalline solid</td>
</tr>
<tr>
<td>Solubility in water (g/cc, %)</td>
<td>26.4</td>
</tr>
<tr>
<td>Bulk Density (lbs/ft³)</td>
<td>72-80</td>
</tr>
<tr>
<td>pH</td>
<td>5.0-9.0</td>
</tr>
<tr>
<td>Vapor pressure mm Hg/747°C</td>
<td>2.4</td>
</tr>
<tr>
<td>Vapor density (Air =1)</td>
<td>NA</td>
</tr>
<tr>
<td>Boiling point</td>
<td>2669°F/ 1465 deg°C</td>
</tr>
<tr>
<td>Specific Gravity (water=1)</td>
<td>2.16</td>
</tr>
<tr>
<td>Melting point</td>
<td>1474°F/ 801°C</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>NA</td>
</tr>
</tbody>
</table>

10. **STABILITY AND REACTIVITY**

**Stability:** Stable.

**Incompatible Materials and conditions to avoid:** Avoid contact with strong acids, caustics, ammonia and cyanides. Sodium chloride is incompatible with lithium and bromine trifluoride. Magnesium chloride is incompatible with Furan-2-peroxycarboxylic acid.

**Hazardous polymerization:** Has not been reported.

**Hazardous decomposition products:** May evolve chlorine gas when in contact with strong acids. Possibly chlorine, nitrogen and sodium containing compounds.

11. **TOXICOLOGICAL INFORMATION**

**PRODUCT BASED**

No data available. The toxicity information provided is for the ingredients of the product.

**INGREDIENT BASED**

- For sodium chloride (CAS# 7647-14-5): Rat-oral LD50 is 3000 mg/kg. Rat inhalation LC50 > 42 g/m³/1hr. Skin dermal LD50 > 10 g/kg.
- For magnesium chloride (CAS# 7786-30-3). Rat-oral LD50 is 2800 mg/kg.

**Possible target organs:** None known.

**Medical conditions that may be aggravated by exposure:** No data available.

**Carcinogens:** None per OSHA, NTP, or IARC
12. **ECOLOGICAL INFORMATION**

**Ecotoxicity:** No definitive information is available on environmental impact if product is released to the environment. Prevent contamination of ground water and surface water.

For Sodium chloride: LC50 for 96 hours (total), static; freshwater, species: *Lepomis macrochirus* (Bluegill, size 5.3-7.2 cm, wt 3.5-3.9 g); 12,946 mg/L.

13. **DISPOSAL CONSIDERATIONS**

This material (as packaged) may be considered a hazardous waste. Be aware that the waste owner has responsibility for final disposal. Regulations may also apply to empty containers, liners or rinsate. Laws may change or be reinterpreted; state and local regulations may be different from federal regulations. This information applies to materials as manufactured; contamination or processing may change waste characteristics and requirements.

14. **TRANSPORTATION INFORMATION**

D.O.T. Shipping Name: Not listed  
Technical Shipping Name: Not listed  
D.O.T. Hazard Class: Not Listed  
UN/NA Number: Not listed

15. **REGULATORY INFORMATION**

**SARA TITLE III (Superfund Amendments and Reauthorization Act):**  
Section 302 Extremely Hazardous Materials: Not listed  
Section 304 Notification Of Accidental Release: Not listed  
Sections 311/312 Hazard Categories: Not listed  
Section 313 Toxic Chemical Release Reporting: None

**TSCA Status:** All components of this product are currently listed on the TSCA Inventory  
**STATE REGULATORY INFORMATION:** Since each state has the authority to promulgate standards more stringent than the federal government, this section cannot provide an inclusive list of all state regulations which apply to this product.

16. **OTHER INFORMATION**

For additional information, refer to the 2004 North American Emergency Response Guidebook.  
**This information is provided in good faith, but without express or implied warranty.**

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