



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identity: Heat Wave™ Liquid Calcium Chloride

Recommended use of the chemical and restrictions on use: Anti-icing and Deicing.

Manufacturer: Green Touch Systems, LLC
1170 Eagan Industrial Rd
Eagan, MN 55121
Telephone: (651) 414-6248

Emergency Phone: CHEMTREC: (800) 424-9300

SDS Date of Preparation: 5/22/2015

2. HAZARDS IDENTIFICATION

GHS Classification:

Physical	Health	Environment
Not Hazardous	Eye Irritation Category 2A	Not Hazardous

GHS Label Elements:



Warning!

Causes serious eye irritation.

Wash thoroughly after handling.

Wear eye and face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical attention.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Water	7732-18-5	60-75%
Magnesium Chloride	007791-18-6	2-4%
Calcium Chloride	10043-52-4	25-30%
Corrosion Inhibitor	N/A	8-10%

4. FIRST AID MEASURES

Eye: Flush victim's eyes with large quantities of water, while holding the eyelids apart. Get medical attention if irritation occurs and persists.

Skin: Wash skin thoroughly with soap and water. Get medical attention if irritation develops. Remove and launder clothing before reuse.

Ingestion: Do not induce vomiting. Rinse mouth with water and give one glass of water to drink. Never give anything by mouth an unconscious or convulsing person. Get medical attention if symptoms develop.

Inhalation: Remove victim to fresh air. If breathing is difficult or irritation persists, get medical attention.

Most important Symptoms: May cause slight eye and skin irritation.

Indication of immediate medical attention/special treatment: Immediate medical attention is not required.

5. FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use media appropriate for surrounding fire. Cool fire exposed containers and structures with water.

Specific hazards arising from the chemical: Thermal decomposition may yield hydrogen chloride, halogenated compounds, and chlorine gas.

Special Protective Equipment and Precautions for Fire-Fighting Instructions: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Aqueous solutions may cause surfaces to be extremely slippery and cause a slip hazard.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Wear appropriate protective clothing as described in Section 8. Wash thoroughly after handling.

Methods and Materials for Containment and Cleaning Up: Dike and collect liquid or absorb with an inert absorbent and place in appropriate containers for disposal. Flush spill area with water. Report releases as required by local, state, and federal authorities.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with the eyes, skin, and clothing. Avoid breathing mists or aerosols. Wear protective clothing and equipment as described in Section 8. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

Conditions for Safe Storage, Including Any Incompatibilities: Store in a cool, dry, well-ventilated area away from incompatible materials. Product may be corrosive to some metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Calcium Chloride	None Established
Performance Additive	None Established

Engineering Controls: Use with adequate general ventilation to minimize exposures.

Respiratory Protection: In operations where exposure levels are excessive, a NIOSH approved respirator with dust/mist cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Skin Protection: Wear impervious gloves such as rubber or neoprene if needed to avoid prolonged skin contact.

Eye Protection: Safety glasses recommended.

Other: Long-sleeved clothing and long pants recommended to avoid prolonged skin contact. Suitable washing facilities should be available in the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance And Odor: Clear liquid with no odor.

Physical State: Liquid	Odor Threshold: Not established
Vapor Density: Not determined	Initial Boiling Point/Range: 110-122°C (230-252°F)
Solubility In Water: Soluble	Vapor Pressure: Not determined
Relative Density: 1.25-1.42	Evaporation Rate: Not determined
Melting/Freezing Point: Not determined	pH: 5-9
VOC Content: Not determined	Octanol/Water Coefficient: Not determined
Solubility: Complete	Decomposition Temperature: Not determined
Viscosity: <100 cP @ 70°F	Flammability (solid, gas): Not applicable
Flashpoint: None	Autoignition Temperature: Not determined
Flammable Limits: LEL: Not determined	UEL: Not determined

10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: None known.

Incompatible Materials: Strong oxidizing agents, concentrated acids, and some metals.

Hazardous Decomposition Products: When heated to decomposition emits hydrogen chloride, halogenated compounds, and chlorine gas.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:

Ingestion: Ingestion may cause slight irritation with nausea, vomiting, and diarrhea.

Inhalation: Inhalation of mists may cause slight irritation of the nose throat and upper respiratory tract.

Eye: May cause slight irritation with pain and tearing.

Skin: May cause slight irritation on prolonged or repeated contact.

Sensitization: This material is not known to cause sensitization.

Chronic: None known.

Carcinogenicity: None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP, or OSHA.

Germ Cell Mutagenicity: None currently known.

Reproductive Toxicity: None currently known.

Numerical Measures of Toxicity:

No toxicity data available

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available

Persistence and Degradability: Biodegradation is not applicable to inorganic substances.

Bioaccumulative Potential: No data available

Mobility in Soil: No data available

Other Adverse Effects: None known

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local, state, and federal environmental regulations.

14. TRANSPORT INFORMATION

DOT Hazardous Materials Description:

Proper Shipping Name: Not regulated

UN Number: None

Hazard Class/Packing Group: None

Labels Required: None

15. REGULATORY INFORMATION

CERCLA: This product is not subject to CERCLA release reporting. Many states have more stringent release reporting requirements. Report spills required under federal, state, and local regulations.

SARA Hazard Category (311/312): Not Hazardous

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements under SARA Title III, Section 313 (40 CFR 372): None

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

CANADA:

This product has been classified under the CPR and this MSDS discloses information elements required by the CPR.

Canadian CEPA: All the components of this product are listed on the Canadian DSL.

Canadian WHMIS Classification: Not classified as dangerous

16. OTHER INFORMATION

NFPA Rating: Health = 2	Flammability = 0	Instability = 0
HMIS Rating: Health = 2	Flammability = 0	Physical Hazard = 0

SDS Revision History:

5/12/2014: New SDS

05/22/2015: Updated SDS with new classification

Disclaimer: *This Safety Data Sheet (SDS) is provided in response to customer requests to address the safe handling of the product. All statements, technical information and recommendations contained herein are the best of our knowledge, reliable and accurate. This SDS is not intended to make any representation as to how the product will perform when used for its intended purpose by a user. In that regards the product is sold "AS IS" and nothing in this SDS should be deemed to be a representation or warranty of any injury, loss, or damage, of any kind or nature, which are sustained by or arise from the use of the product. Nothing in this SDS is intended to be a representation or warranty by the manufacturer of the accuracy, safety, or usefulness for any purpose of any technical information, materials, techniques, or practices.*

The information contained in this Safety Data Sheet is, to the best of our knowledge, accurate and reliable. This information should be provided to all individuals handling this product. Federal, state, and local regulations should be followed when handling this product.