Inferno™ Snow and Ice Melter Safety Data Sheet

SECTION 1: IDENTIFICATION
1.1. Product Identifier
Product Form: Mixture
Product Name: Inferno™ Snow and Ice Melter
1.2. Intended Use of the Product
Use of the Substance/Mixture: Ice melter
1.3. Name, Address, and Telephone of the Responsible Party
Company
National Ice Melt
www.nationalicemelt.com
1.4. Emergency Telephone Number
Emergency Number: 508-543-2138

SECTION 2: HAZARDS IDENTIFICATION
2.1. Classification of the Substance or Mixture
Classification (GHS-US)
Not classified
2.2. Label Elements
GHS-US Labeling
No labeling applicable
2.3. Other Hazards
Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.
2.4. Unknown Acute Toxicity (GHS-US)
No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.1. Substance
Not applicable
3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium chloride</td>
<td>(CAS No) 7647-14-5</td>
<td>*</td>
<td>Not classified</td>
</tr>
<tr>
<td>Potassium Acetate</td>
<td>(CAS No) 127-08-2</td>
<td>*</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Urea</td>
<td>(CAS No) 57-13-6</td>
<td></td>
<td>Not Classified</td>
</tr>
</tbody>
</table>
| Calcium magnesium acetate (CMA) | (CAS No) 76123-46-1               | *    | Acute Tox. 4 (Inhalation: dust, mist), H332  
Eye Irrit. 2B, H320 |
| Acid Blue 9           | (CAS No) 2650-18-2                     |      | Not classified                                      |
| Water                 | (CAS No) 7732-18-5                     |      | Not classified                                      |
| Glycol Blend*         | (CAS No) Proprietary                  |      | Not classified                                      |

Full text of H-phrases: see section 16
*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret.

SECTION 4: FIRST AID MEASURES
4.1. Description of First Aid Measures
First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).
First-aid Measures After Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
First-aid Measures After Skin Contact: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.
First-aid Measures After Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if redness, pain, or irritation occurs.
First-aid Measures After Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/Injuries: None expected under normal conditions of use.
Symptoms/Injuries After Inhalation: May cause respiratory irritation.
Symptoms/Injuries After Skin Contact: May cause skin irritation.
Symptoms/Injuries After Eye Contact: May cause eye irritation.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.
Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed
If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media
Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.
Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture
Fire Hazard: Not flammable.
Explosion Hazard: Product is not explosive.
Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters
Precautionary Measures Fire: Exercise caution when fighting any chemical fire.
Firefighting Instructions: Use water spray or fog for cooling exposed containers.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Other Information: Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing dust. Avoid generating dust.

6.1.1. For Non-emergency Personnel
Protective Equipment: Use appropriate personal protection equipment (PPE).

6.1.2. For Emergency Responders
Protective Equipment: Equip cleanup crew with proper protection.
Emergency Procedures: Stop leak if safe to do so. Ventilate area.

6.2. Environmental Precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and Material for Containment and Cleaning Up
For Containment: Contain and collect as any solid.
Methods for Cleaning Up: Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections
See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling
Additional Hazards When Processed: Avoid dust production.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities
Technical Measures: Comply with applicable regulations.
Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

7.3. Specific End Use(s)
Ice melter.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters
For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).
8.2. Exposure Controls
Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.


Materials for Protective Clothing: Chemically resistant materials and fabrics.
Hand Protection: Wear chemically resistant protective gloves.
Eye Protection: Chemical safety goggles.
Skin and Body Protection: Wear suitable protective clothing.
Respiratory Protection: Use NIOSH-approved dust mask if dust has the potential to become airborne.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
9.1. Information on Basic Physical and Chemical Properties
Physical State: Solid
Appearance: No data available
Odor: No data available
Odor Threshold: No data available
pH: No data available
Evaporation Rate: No data available
Melting Point: No data available
Freezing Point: No data available
Boiling Point: 1461 °C (2661.8 °F) (Sodium Chloride)
Flash Point: No data available
Auto-ignition Temperature: No data available
Decomposition Temperature: No data available
Flammability (solid, gas): No data available
Vapor Pressure: No data available
Relative Vapor Density at 20 °C: No data available
Relative Density: No data available
Specific gravity / density: 2.17 g/cm³ (Sodium Chloride)
Solubility: No data available
Partition Coefficient: N-Octanol/Water: No data available
Viscosity: No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY
10.1. Reactivity: Hazardous reactions will not occur under normal conditions.
10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
10.4. Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.

SECTION 11: TOXICOLOGICAL INFORMATION
11.1. Information On Toxicological Effects
Acute Toxicity: Not classified

Urea (57-13-6)
LD50 Oral Rat 8471 mg/kg
Inferno™ Snow and Ice Melter Safety Data Sheet
According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

**Calcium magnesium acetate (CMA) (76123-46-1)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Oral Rat</td>
<td>3071 mg/kg</td>
</tr>
<tr>
<td>LD50 Dermal Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LC50 Inhalation Rat</td>
<td>&gt; 4600 mg/m³ (Exposure time: 4 h)</td>
</tr>
<tr>
<td>ATE (Dust/Mist)</td>
<td>1.50 mg/l/4h</td>
</tr>
</tbody>
</table>

**Sodium chloride (7647-14-5)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Oral Rat</td>
<td>3 g/kg</td>
</tr>
<tr>
<td>LC50 Inhalation Rat</td>
<td>&gt; 42 g/m³ (Exposure time: 1 h)</td>
</tr>
</tbody>
</table>

**Skin Corrosion/Irritation:** Not classified
**Serious Eye Damage/Irritation:** Not classified
**Respiratory or Skin Sensitization:** Not classified
**Germ Cell Mutagenicity:** Not classified
**Carcinogenicity:** Not classified
**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified
**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified
**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.
**Symptoms/Injuries After Skin Contact:** May cause skin irritation.
**Symptoms/Injuries After Eye Contact:** May cause eye irritation.
**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.
**Chronic Symptoms:** None expected under normal conditions of use.

### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1. Toxicity

**Urea (57-13-6)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 Fish 1</td>
<td>16200 – 18300 mg/l (Exposure time: 96 h – Species: Poecilia reticulata)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>3910 mg/l (Exposure time: 48 h – Species: Daphnia magna [Static])</td>
</tr>
</tbody>
</table>

**Sodium chloride (7647-14-5)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 Fish 1</td>
<td>5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td>LC 50 Fish 2</td>
<td>12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])</td>
</tr>
<tr>
<td>EC50 Daphnia 2</td>
<td>340.7 (340.7 - 469.2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])</td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and Degradability

**No additional information available**

#### 12.3. Bioaccumulative Potential

**Urea (57-13-6)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 1</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Log Pow</td>
<td>-1.59 (at 25 °C)</td>
</tr>
</tbody>
</table>

**Sodium chloride (7647-14-5)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 1</td>
<td>(no bioaccumulation)</td>
</tr>
</tbody>
</table>

#### 12.4. Mobility in Soil

**No additional information available**

#### 12.5. Other Adverse Effects

**Other Information:** Avoid release to the environment.

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

**Ecology – Waste Materials:** Avoid release to the environment.

### SECTION 14: TRANSPORT INFORMATION

#### 14.1. In Accordance with DOT

**Not regulated for transport**

#### 14.2. In Accordance with IMDG

**Not regulated for transport**

#### 14.3. In Accordance with IATA

**Not regulated for transport**
SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Urea (57-13-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Sodium chloride (7647-14-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2 US State Regulations
Neither this product nor its chemical components appear on any US state lists.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date: 01/05/2015
Other Information:
This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

<table>
<thead>
<tr>
<th></th>
<th>Acute toxicity (inhalation:dust,mist) Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4</td>
<td>Acute toxicity (inhalation:dust,mist) Category 4</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation Category 2A</td>
</tr>
<tr>
<td>Eye Irrit. 2B</td>
<td>Serious eye damage/eye irritation Category 2B</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H320</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.