

Firestorm Ice Melter

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision Date: 06/01/2015

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Firestorm Ice Melter

Synonyms: Ice Melting Compound contains a proprietary combination of Sodium Chloride. Urea, Magnesium Chloride granules and Liquid Magnesium Chloride with corrosion inhibitor & orange dye pigment (FS2000)

1.2. Intended Use of the Product: Melting Ice

1.3. Name, Address, and Telephone of the Responsible Party

Company

HLF Diversified Inc

2934 Vandorf Sideroad

Gormley, Ontario, Canada L0H 1G0

Office: (905) 841-2730

Fax: (905) 841-2897

1.4. Emergency Telephone Number

Emergency Number : (905)-841-2730 (Monday – Friday 8:00am-5:00pm EST)

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

Other Hazards: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits irritating fumes. May be corrosive to metals upon prolonged contact.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Sodium Chloride	(CAS No) 7647-14-5	Proprietary	Not classified
Magnesium Chloride	(CAS No) 7786-30-3	Proprietary	Not classified
Urea	(CAS No) 57-13-6	Proprietary	Not classified

The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

Full text of H-phrases: see section 16

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 where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. 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: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation persists. Wash contaminated clothing before reuse.

First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Dust may cause mechanical irritation to eyes, nose, throat, and lungs

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Symptoms/Injuries After Inhalation: May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: Skin contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Eye Contact: Prolonged contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Ingestion: Harmful if swallowed. Ingestion is likely to be harmful or have adverse effects.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

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 considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: When heated to decomposition, emits irritating fumes.

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: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid breathing (dust, fumes). Avoid all contact with skin, eyes, or clothing.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: When heated to decomposition, emits irritating fumes.

Precautions for Safe Handling: Do not breathe vapors, mist, spray.

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 again when leaving work. Do not eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling.

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 extremely high or low temperatures, direct sunlight, heat, ignition sources, incompatible materials.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers. Reactive metals.

Special Rules on Packaging: Keep only in original container.

Packaging materials: Store in corrosive resistant container with a resistant inner liner.

7.3. Specific End Use(s) Melting Ice

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

No additional information available.

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8.2. Exposure Controls

Appropriate Engineering Controls

: 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. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

: Protective goggles. Protective clothing. Gloves.



Materials for Protective Clothing

: Chemically resistant materials and fabrics. Corrosion proof clothing.

Hand Protection

: Wear chemically resistant protective gloves.

Eye Protection

: Chemical goggles or face shield.

Skin and Body Protection

: Wear suitable protective clothing.

Respiratory Protection

: Not required under normal conditions of use.

Other Information

: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State

: Solid

Appearance

: Orange, Translucent Dry Granules, Pellets, and Crystalline Solid

Odor

: Minimal Odor

Odor Threshold

: No data available

pH

: No data available

Evaporation rate

: No data available

Melting Point

: 118 - 801 °C (244.4 - 1473.8 °F)

Freezing Point

: No data available

Boiling Point

: 160 - 1413 °C (320.0 - 2575.4 °F)

Flash Point

: No data available

Auto-ignition Temperature

: No data available

Decomposition Temperature

: No data available

Flammability (solid, gas)

: No data available

Vapor Pressure

: 1 mm Hg @ 865°C (1589°F)

Relative Vapor Density at 20 °C

: No data available

Relative Density

: No data available

Specific Gravity

: 1.6 - 2.16

Solubility

: 317 gpl @ 0° C (32°F). Hygroscopic. Soluble in alcohols. 36g/ 100g H₂O @20°C (68°F).

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: When heated to decomposition, emits irritating fumes.

10.2 Chemical Stability: Stable under normal conditions.

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.

10.5 Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Reactive metals.

10.6 Hazardous Decomposition Products: Hydrogen chloride. Chlorine. Sodium oxides. Potassium oxides. Oxides of magnesium.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

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Sodium Chloride (7647-14-5)	
LD50 Oral Rat	3 g/kg
LC50 Inhalation Rat	> 42 g/m ³ (Exposure time: 1 h)
Magnesium Chloride (7786-30-3)	
LD50 Oral Rat	2800 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
Urea (57-13-6)	
LD50 Oral Rat	8471 mg/kg
LD50 Dermal Rat	9200 mg/kg

Skin Corrosion/Irritation: Not classified

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: Skin contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Eye Contact: Prolonged contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Ingestion: Harmful if swallowed. Ingestion is likely to be harmful or have adverse effects.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Sodium Chloride (7647-14-5)	
LC50 Fish 1	5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 2	340.7 (340.7 - 469.2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
Magnesium Chloride (7786-30-3)	
LC50 Fish 1	1970 - 3880 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	140 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
Urea (57-13-6)	
LC50 Fish 1	22500 ug/l (Exposure time: 96 h - Species: Tilapia Mossambicia [static])
EC50 Daphnia 1	3910000 ug/l (Exposure time: 48 h - Species: Daphnia magna)
Urea (57-13-6)	
LC50 Fish 1	22500 ug/l (Exposure time: 96 h - Species: Tilapia Mossambicia [static])
EC50 Daphnia 1	3910000 ug/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and Degradability No additional information available

12.3. Bioaccumulative Potential

Firestorm Ice Melter	
Bioaccumulative Potential	Not established.
Sodium Chloride (7647-14-5)	
BCF fish 1	(no bioaccumulation)

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Magnesium Chloride (7786-30-3)	
BCF fish 1	(no bioaccumulation)

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.

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

Sodium Chloride (7647-14-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Magnesium Chloride (7786-30-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Urea (57-13-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2 US State Regulations

Sodium Chloride (7647-14-5)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
Magnesium Chloride (7786-30-3)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
Urea (57-13-6)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

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

Revision date : 06/01/2015
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200. The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

GHS Full Text Phrases:

Skin Irrit. 2	Skin corrosion/irritation Category 2
Eye Dam. 1.	Serious eye damage/eye irritation Category 1
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation

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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.