



**SECTION 1: IDENTIFICATION**

**1.1. Product Identifier**

Product Form: Mixture

Product Name: Perfect Path™ Formula Snow and Ice Control

**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

Flagship Packaged Products, LLC

723 South State Street

Clarks Summit, PA 18411

**1.4. Emergency Telephone Number**

Emergency Number : 1-888-779-1339

**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**

Name	Product Identifier	%	Classification (GHS-US)
Sodium chloride	(CAS No) 7647-14-5	95-99	Not classified
Calcium chloride	(CAS No) 10043-52-4	1-5	Eye Irrit. 2A, H319
Acetic acid, calcium magnesium salt	(CAS No) 76123-46-1	1	Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Irrit. 2B, H320
Water	(CAS No) 7732-18-5	0.45 - 0.52	Not classified
C.I. Direct Orange 118	(CAS No) 60202-34-8	0.27 - 0.38	Not classified
C.I. Acid Yellow 23	(CAS No) 1934-21-0	0.18 - 0.25	Comb. Dust
Glycol Blend*	(CAS No) Proprietary	0.04 - 0.08	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).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 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.

**Incompatible Products:** Strong acids. Strong bases. Strong oxidizers.

### 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.

**Personal Protective Equipment**

: Protective goggles. Gloves. Protective clothing. Dust formation: dust mask.



**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.

**Environmental Exposure Controls**

: Do not allow the product to be released into the environment.

**Consumer Exposure Controls**

: Do not eat, drink or smoke during use.

**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/cm <sup>3</sup> (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.
- 10.5. **Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.
- 10.6. **Hazardous Decomposition Products:** Sodium oxides. Hydrogen chloride gas. Oxides of calcium. Oxides of magnesium.



**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1. Information On Toxicological Effects**

Acute Toxicity: Not classified

<b>Calcium chloride (10043-52-4)</b>	
LD50 Oral Rat	1455 - 2781 mg/kg
LD50 Dermal Rabbit	> 5000 mg/kg
<b>C.I. Acid Yellow 23 (1934-21-0)</b>	
LD50 Oral Rat	12750 mg/kg
<b>Acetic acid, calcium magnesium salt (76123-46-1)</b>	
LD50 Oral Rat	3071 mg/kg
LD50 Dermal Rat	> 5000 mg/kg
LC50 Inhalation Rat	> 4600 mg/m <sup>3</sup> (Exposure time: 4 h)
ATE (Dust/Mist)	1.50 mg/l/4h
<b>Sodium chloride (7647-14-5)</b>	
LD50 Oral Rat	3 g/kg
LC50 Inhalation Rat	> 42 g/m <sup>3</sup> (Exposure time: 1 h)

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**

<b>Calcium chloride (10043-52-4)</b>	
LC50 Fish 1	10650 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	2400 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>Sodium chloride (7647-14-5)</b>	
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])

**12.2. Persistence and Degradability** No additional information available

**12.3. Bioaccumulative Potential**

<b>Calcium chloride (10043-52-4)</b>	
BCF fish 1	(no bioaccumulation)
<b>Sodium chloride (7647-14-5)</b>	
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.

**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**

<b>Calcium chloride (10043-52-4)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>C.I. Acid Yellow 23 (1934-21-0)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>Water (7732-18-5)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>Sodium chloride (7647-14-5)</b>
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** : 02/05/2015  
**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:**

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Comb. Dust	Combustible Dust
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Comb. Dust	May form combustible dust concentrations in air
H319	Causes serious eye irritation
H320	Causes eye irritation
H332	Harmful if inhaled

*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.*

SDS US (GHS HazCom)