

# SDS

## 1. Product and Company Identification

- ThermaFreeze Products Corporation - PO Box 442, Vernon NJ 07462
- Company phone number: 877-777-8397
- Company fax number: 732-764-7697
  
- ThermaFreeze 3-ply absorbent ice sheets.
- Made up of 2" x 2" pockets spaced 0.5" apart with 0.5 grams of absorbent powder.
  
- Shipping Information:  
Class: 70 - 150                      NMFC#: 56828-4 to 56828-5
  
- **EMERGENCY PHONE NUMBER: 24 hours a day, 7 days a week.**  
**Chemtrec 1-800-424-9300**

## 2. Hazards Identification

- Eyes: Dust may cause burning, drying, itching, and other discomfort resulting in reddening of the eyes.
- Skin: Exposure to the dust, such as in manufacturing may aggravate existing skin conditions due to drying effect.
- Inhalation: Exposure to respirable dust may cause respiratory tract and lung irritation and may aggravate existing respiratory conditions
- Ingestion: Although not a likely route of entry, tests have shown that polyacrylate absorbents are non-toxic if ingested. However, as in any instance of non-food consumption, seek medical attention in the event of any adverse symptoms. Could cause suffocation
- HMIS Ratings: Health 1    Fire: 0    Reactivity: 0  
Hazard Scale: 0=Minimal    1=Slight    2 = Moderate    3=Serious    4=Severe    \*=Chronic Hazard

## 3. Composition /in-Substance formation on Ingredients

- Polyester/Polyethylene
- Acrylic Acid, Polymers, Sodium Salt
- Polyethylene, Polypropylene
- Polyethylene

## 4. First-aid Measures

- Eyes: Immediately flush with plenty of water for at least 15 minutes and continue flushing until irritation subsides. Remove particles remaining under the eyelids. Seek medical attention if irritation persists.
- Skin: Remove any powder or gel from skin using soap and water. If irritation persists seek medical attention.
- Inhalation: If inhaled, move to a source of fresh air. Seek medical attention if symptoms persist.
- Ingestion: Non-toxic by ingestion. However, if adverse symptoms appear, seek medical attention.

## 5. Firefighting Measures

- General Fire Hazards: No Recognized fire hazards associated with finished product.
- Flash Point: > 300° C
- Extinguishing Media: Dry chemical, foam, carbon dioxide and water fog.
- Special Firefighting Procedures: Cool with water spray, remove heat source. Wear positive pressure, self-contained breathing apparatus when fighting a fire in any closed space.
- NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0  
Hazard Scale: 0=Minimal 1=Slight 2 = Moderate 3=Serious 4=Severe \*=Chronic Hazard

## 6. Accidental Release Measures

- Containment Procedures: If open powder is spilled, sweep or vacuum material when possible and dispose in waste container.

## 7. Handling and Storage

- Handling: Avoid breathing vapor, dust or fumes. If powder is exposed handle as an eye and respiratory tract irritant.
- Storage: Store in a dry, clean place away from flames.

## 8. Exposure Controls / Personal Protection

- Eye Protection: None required when used as intended.
- Gloves: None required when used as intended.
- Respiratory: None required.
- Ventilation: None required.
- General Product Information: This product is not regulated as a hazardous material. However, the manufacturer recognizes if the powder is exposed the potential for respiratory tract irritation and recommends an eight-hour exposure limit of 0.05mg/m<sup>3</sup>.
- Engineering Controls: Normal ventilation.

## 9. Physical and Chemical Properties

- Appearance: White Perforated film Sheet, white fabric and transparent poly-film bonded together in pockets with white granular powder enclosed.
- Odor: Negligible.
- Water Solubility: Insoluble but, swells in water.
- Melting Point: 350°F.

## 10. Stability and Reactivity

- Stability: Stable under normal ambient conditions.
- Conditions to Avoid: High temperature.
- Incompatible Materials to Avoid: Strong oxidizers.
- Hazardous Decomposition Products: Thermal decomposition Products: Thermal decomposition products include but, are not limited to: Carbon monoxide, carbon dioxide, acetic fumes, acrolein, aldehydes, olefinic or paraffinic hydrocarbons.

## 11. Toxicological Information

- Independent Lab test have been conducted on each component of ThermaFreeze product.
- Toxic Elements Analysis:  
With reference to section 4.3.5 of the ASTM standard consumer safety specification on toy safety F963-07, acid digestion and extraction methods were used and toxic elements content were determined by inductivity coupled argon plasma spectrometry.

RESULT IN PARTS PER MILLION (ppm)

TESTED CONTENTS	PRINTED FILM	WHITE FABRIC	PERFORATED FILM	Limits ppm
Total Lead (Pb)	<10	<10	<10	600
Sol. Barium (Ba)	<5	<5	<5	1000
Sol. Lead (Pb)	<5	<5	<5	90
Sol. Cadmium (Cd)	<5	<5	<5	75
Sol. Antimony (Sb)	<5	<5	<5	60
Sol. Selenium (Se)	<5	<5	<5	500
Sol. Chromium (Cr)	<5	<5	<5	60
Sol. Mercury (Hg)	<5	<5	<5	60
Sol. Arsenic (As)	<2.5	<2.5	<2.5	25

*Sol. = Soluble      < = Less Than*

- Granular Powder Acute and Chronic Toxicity:
 

Acute Oral Toxicity:	LD <sub>50</sub> rat	Dose: > 5,000 mg/kg	Method: Limit Test
Acute Dermal Toxicity:	LD <sub>50</sub> rat	Dose: > 2,000 mg/kg	Method: Limit Test
Skin Irritation:	Rabbit	Method: OECD Nr. 404	Very Slight Irritation
Eye Irritation:	Rabbit	Method: OECD Nr. 405	Very Slight
Sensitization:	Guinea Pig	Method: OCED Nr. 406	Result: 0/20
	No Sensitization		

Acute Toxicity - LD<sub>50</sub> /LC<sub>50</sub>

Sodium Polyacrylate (9003-04-7)

LD<sub>50</sub>: Oral LD50 Rat: >40g/kg

Chronic Toxicity: Chronic inhalation exposure to rates for a lifetime (2 years) using sodium polyacrylate that had been micronized to a respirable particle size (less than 10 microns) produced non-specific inflammation and chronic lung injury at 0.2mg/m<sup>3</sup> and 0.8mg/m<sup>3</sup>. In the absence of chronic inflammation, tumors are not expected. There were no adverse effects detected at 0.5mg/m<sup>3</sup>.

## 12. Ecological Information

- Degradability: Not Biodegradable
- Ecotoxicity: No indication this material is a risk to the environment.

## 13. Disposal Considerations

- Like most thermoplastics, this product can be recycled if the individual components are broken down and is preferred to landfill disposal or incineration. If the ability to recycle is not available, this material can be disposed of in a regulated landfill or incinerated according to local and federal regulations.

## 14. Transport Information

- This product is not regulated for transportation. There are no special conditions required for transport of any of this material, as it is not classified as a hazardous material under U.S. Department of Transportation, Canadian Transport, European Transport or United Nations regulations.
- Shipping Information:  
Class: 70 - 150                      NMFC#: 56828-4 to 56828-5

## 15. Regulatory Information

- U.S. Federal Regulations
- FDA:  
Independent Lab tests have been conducted on each component of ThermaFreeze product and MEETS 21 CFR FDA Regulation Section 177.1350 Clause B on Ethylene-Vinyl Acetate Co-polymer (EVA) and 21 CFR FDA Regulation Section 177.1520 on Polymers, Olefin Polymers and Polyethylene for Direct Contact with Food.

### TEST RESULTS

Condition of Use: For Use in articles that contact food except for articles used for packing or holding food during cooking.

#### Test Results For FDA Regulation on Olefin Copolymer

PARAMETER	RESULT	LIMIT	CONCLUSION
Density	0.9	1.00	Pass
n-Hexane Extract	1.4% - 2.6%	5.5%	Pass
Solubles Xylene	3% - 3.7%	30%	Pass

#### Test Results For FDA Regulation on Ethylene-Vinyl Acetate (EVA)

*Chloroform Soluble Extra Extractive Residue in the following:*

PARAMETER	RESULT (mg/in <sup>2</sup> )	LIMIT (mg/in <sup>2</sup> )	CONCLUSION
Water Extract	< 0.10	0.5	Pass
Heptane Extract	< 0.10	0.5	Pass
8% Alcohol Extract	< 0.10	0.5	Pass

State Regulations:

Independent Lab tests have been conducted on each component of ThermaFreeze product and meets California Health and Safety Code, Part 3 Division 104, Chapter 11 Requirement on Phthalate.

#### Phthalate Content Test:

With reference to ASTM D3421, by gas Chromatographic-Mass Spectrometric (GC-MS) Analysis.

PARAMETER	RESULT	LIMIT	CONCLUSION
Dibutyl Phthalate (DBP)	< 0.01%	0.5	Pass
Diethyl Hexyl Phthalate (DEHP)	< 0.01%	0.5	Pass
Benzyl Butyl Phthalate (BBP)	< 0.01%	0.5	Pass
Di-iso-nonyl Phthalate (DINP)	< 0.01%	0.1	Pass
Di-N-octyl Phthalate (DNOP)	< 0.01%	0.1	Pass



## 16. Other Information

- Date of revision: 01/23/17  
2017 v5
- Updated to current uniformed SDS Format.

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- Date of last revision: 03/22/17  
2017 v5.01
  - Updated section 13