

# Material Safety Data Sheet (MSDS)

## Abbreviations used on this MSDS:

ACGIH = American Conference of Governmental Industrial Hygienists, CAN = Canada, CAS = Chemical Abstracts Service Division of the American Chemical Society, CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act (US), DOT = US Department of Transportation, IARC = International Agency for Research on Cancer, ICAO = International Civil Aviation Organization, IMO = International Maritime Organization, LC<sub>50</sub> = Lethal concentration by inhalation to cause death in 50% of a test population of animals, LD<sub>50</sub> = Lethal dose by oral or dermal contact to cause death in 50% of a test population of animals, mmHG = millimetres of mercury, MSDS = Material Safety Data Sheet, NFPA = National Fire Protection Association (US), °C = temperature in degrees celsius, OSHA = Occupational Safety and Health Administration (US), pH = indicates acidity < 7 or alkalinity > 7, ppm = parts per million, PEL = Permissible Exposure Limit, SARA = Superfund Amendment and Re-authorization Act (US), TDG = Transportation of Dangerous Goods (CAN), TLV = Threshold Limit Value, TSCA = Toxic Substances Control Act (US), UN = United Nations, US = United States, WHMIS = Workplace Hazardous Materials Information System (CAN)

## SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Product Identifier</b>			
<b>Gel Ice Pack</b>			
<b>Product Use</b> Use in shipping/storing/packing products that require temperature maintenance and/or shock protection.			
<b>Manufacturer's Name</b> Cryopak Corporation		<b>Supplier's Name</b> Emerging Technologies, Inc.	
<b>Street Address</b> 1053 Derwent Way		<b>Street Address</b> 400-A Edwards Drive	
<b>City</b> Delta	<b>Province</b> BC	<b>City</b> Greensboro	<b>Province</b> NC
<b>Postal Code</b> V3M 5R4	<b>Emergency Telephone Number</b> 613.996.6666 (CANUTEC) Use in case of a dangerous goods emergency	<b>Postal Code</b> 27409	<b>Emergency Telephone Number</b> 1.800.424.9300
<b>Date MSDS Prepared</b> April 5, 2002		<b>MSDS Prepared by</b> V.G.Scott & Associates Consulting	<b>Telephone Number</b> 1.888.405.1188

## SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients (specific)	%	CAS Number	LD <sub>50</sub> of Ingredient (specify species and route)	LC <sub>50</sub> of Ingredient (specify species)
Polyacrylate/Polyalcohol Copolymer	1 - 5	130672-62-7	Not available	Not available

## SECTION 3 - HAZARDS IDENTIFICATION

<b>Routes of Entry</b>				
<input checked="" type="checkbox"/> Skin Contact	<input type="checkbox"/> Skin absorption	<input checked="" type="checkbox"/> Eye contact	<input checked="" type="checkbox"/> Inhalation	<input type="checkbox"/> Ingestion
<b>Emergency Overview</b> Product in powder form is a nuisance dust.				
<b>WHMIS Symbols</b> Not regulated under WHMIS.				
<b>Potential Health Effects</b> Product may irritate eyes and skin upon contact but is unlikely to injure tissue.				



**PRODUCT IDENTIFIER: Gel Ice Pack**

**SECTION 4 - FIRST AID MEASURES**

<b>Skin Contact</b> Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops and persists, seek medical attention.
<b>Eye Contact</b> If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.
<b>Inhalation</b> If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.
<b>Ingestion</b> First aid is not normally required; however, if swallowed and symptoms develop, seek medical attention.

**SECTION 5 - FIREFIGHTING MEASURES**

<b>Flammability</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If yes, under which conditions?</b>	
<b>Means of Extinction</b> Use extinguishing media suitable for type of surrounding fire.		
<b>Flash point (°C) and Method</b> No data	<b>Upper Flammability Limit (% by volume)</b> No data	<b>Lower Flammability Limit (% by volume)</b> No data
<b>Autoignition Temperature (°C)</b> No data	<b>Explosion Data – Sensitivity to Impact</b> No data	<b>Explosion Data – Sensitivity to Static Discharge</b> No data
<b>Hazardous Combustion Products</b> Not applicable		
<b>Fire Fighting Instructions</b> Use flooding quantities of water for surrounding materials. Use care when walking in spilled material. Keep unauthorized persons out of area. Fire Fighters should wear positive-pressure self-contained breathing apparatus (SCBA) and full fire protective clothing.		

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

<b>Leak and Spill Procedures</b> Small spill: Use appropriate tools or equipment to clean up spilled liquid material. Small quantities can be flushed to sanitary sewer.  Large Spill: Prevent additional material from being spilled. Keep from entering sewers, watercourses, wells, etc.
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**PRODUCT IDENTIFIER: Gel Ice Pack****SECTION 7 - HANDLING AND STORAGE****Handling Procedures and Equipment**

The use of respiratory equipment is recommended when exposure exceeds established exposure limits. Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal hygiene practice.

**Storage Requirements**

Keep containers tightly closed. Use and store in cool, dry, well-ventilated areas. Store only in approved containers.

**SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION****Exposure Limits**

10 mg/m<sup>3</sup> for dust

☒ ACGIH TLV

☐ OSHA PEL

☐ Other (Specify)

**Specific Engineering Controls (such as ventilation, enclosed process)**

Use appropriate personal protective equipment and clothing to avoid skin contact with liquid product. If spilled product dries out avoid inhaling the dust.

**Personal Protective Equipment**

☒ Gloves

☐ Respirator

☒ Eye

☒ Footwear

☐ Clothing

☐ Other

**If checked, specify type**

Use impervious gloves. Wear safety glasses or safety goggles if there is a risk of splash and spillage. Use suitable waterproof footwear.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b> <input type="checkbox"/> Solid <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Gas	<b>Odour and Appearance</b> Liquid	<b>Odour Threshold (ppm)</b> Odourless
<b>Specific Gravity</b> Not available	<b>Vapour Density (air = 1)</b> Not available	<b>Vapour Pressure (mmHG)</b> Not available
<b>Evaporation Rate</b> Not available	<b>Boiling Point (°C)</b> Not available	<b>Freezing Point (°C)</b> Not available
<b>pH</b> Not available	<b>Coefficient of Water/Oil Distribution</b> Not applicable	<b>Solubility in Water</b> Easily soluble in water.



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**SECTION 10 - STABILITY AND REACTIVITY**

<b>Chemical Stability</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If no, under which conditions?</b>
<b>Incompatibility with Other Substances</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If yes, which ones?</b> Not expected, but specific information is not available.
<b>Reactivity, and Under What Conditions?</b> No specific information is available.	
<b>Hazardous Decomposition Products</b> Possible hazardous short-term degradation products are not likely. However, long-term degradation products may arise.	
<b>Hazardous polymerization</b> Will not occur.	

**SECTION 11 - TOXICOLOGICAL INFORMATION**

<b>Effects of Acute Exposure</b> Use good practice to avoid contact with eyes, skin and clothing with all materials. Wash thoroughly after handling. No acute effects are expected.	
<b>Effects of Chronic Exposure</b> Chronic exposure is not expected to produce any health effects.	
<b>Irritancy of Product</b> Contact with skin and eyes may be irritating.	
<b>Skin Sensitization</b> Not expected	<b>Respiratory Sensitization</b> Not expected
<b>Carcinogenicity – IARC</b> No definitive information is available.	<b>Carcinogenicity – ACGIH</b> No definitive information is available.
<b>Reproductive Toxicity</b> No definitive information is available.	<b>Teratogenicity</b> No definitive information is available.
<b>Embryotoxicity</b> No definitive information is available.	<b>Mutagenicity</b> No definitive information is available.
<b>Name of Synergistic Products/Effects</b> None known	

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**SECTION 12 - ECOLOGICAL INFORMATION**

**Toxicity**

Low toxicity for humans or animals under normal conditions of use.

**Aquatic Marine Toxicity:** Avoid spills or releases to watercourses. This material is not listed as a marine pollutant in the International Maritime Dangerous Goods Code.

**Biochemical Oxygen Demand:** Not available

**Chemical Oxygen Demand:** Not available

**Toxicity of the Products of Degradation:** Not available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Waste Disposal or Recycling**

Recycle to process in manufacturing if possible. Recover and place material in a suitable container for intended use or disposal. Call for assistance on disposal. Ensure disposal is in compliance with federal, provincial and local regulations.

**SECTION 14 - TRANSPORT INFORMATION**

<b>Special Shipping Information</b> Not classified as hazardous.		<b>UN Number</b> Not applicable
<b>TDG</b> Not applicable	<b>DOT</b> Not applicable	
<b>IMO</b> Not applicable	<b>ICAO</b> Not applicable	

**SECTION 15 - REGULATORY INFORMATION**

<b>WHMIS Classification</b> Does not meet any of the WHMIS classification criteria.	<b>OSHA</b> Not determined.
<b>SARA</b> Not determined.	<b>TSCA</b> Not determined.

**SECTION 16 - OTHER INFORMATION**

No additional information is available.