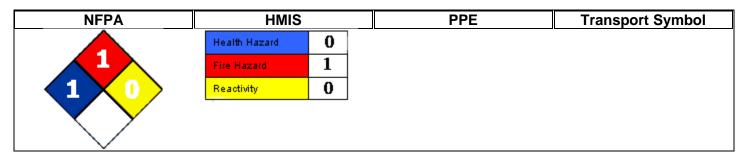
# **Material Safety Data Sheet**



Issuing Date 27-Mar-2009

Revision Date 27-Mar-2009

**Revision Number 1** 

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Cryopak Flexible Ice Blanket

**Recommended Use** Freezer pack.

**Supplier Address** 

Cryopak Industries (2007) ULC 1053 Derwent Way, Delta, BC, V3M 5R4

CA

Phone:6045157977 Fax:6045157978

Contact:Aleksandra Borisova Contact Phone:6045157977 Emergency Phone: 6042501198

Company Emergency Phone Number 6042501198

### 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

This product is an article. No exposure to hazardous chemicals is expected to occur during intended product use.

Misuse of the product may result in exposure to hazardous chemicals.

WARNING! This product contains a chemical known in the State of California to cause cancer

Appearance Clear, colorless solution

Physical State Liquid.

**Odor** Water

**Potential Health Effects** 

Principle Routes of Exposure Inhalation, Skin contact, Eye contact.

**Acute Toxicity** 

Eyes May cause slight irritation

SkinNo known hazard in contact with skin.InhalationNot an expected route of exposure.

**Ingestion** Not an expected route of exposure. Ingestion may cause gastrointestinal irritation, nausea,

vomiting and diarrhea.

Chronic Effects No known effect.

Aggravated Medical Conditions None known

**Environmental Hazard** See Section 12 for additional Ecological Information.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Water	7732-18-5	99-100
3,5,7-Triaza-1-azoniatricyclodecane-1-(3-chloro-2-	4080-31-3	0-0.05
propenyl)-, chloride		
Sodium Bicarbonate	144-55-8	0-0.02
Methenamine	100-97-0	0-0.005
1,3-Dichloropropene	542-75-6	0-0.001
Dichloromethane	75-09-2	0-0.001

# 4. FIRST AID MEASURES

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a

specialist.

**Skin Contact**Wash skin with soap and water. In the case of skin irritation or allergic reactions see a

physician.

**Inhalation** Move to fresh air in case of accidental inhalation of vapors or decomposition products. If

symptoms persist, call a physician.

**Ingestion** Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is not required.

Notes to Physician Treat symptomatically

### 5. FIRE-FIGHTING MEASURES

Flammable Properties Not flammable

Flash Point Not determined.

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment

Hazardous Combustion Products Carbon oxides

**Explosion Data** 

Sensitivity to Mechanical Impact
Sensitivity to Static Discharge
Not sensitive.
Not sensitive.

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

NFPA Health Hazard 1 Flammability 1 Stability 0 Physical and Chemical Hazards -

# **6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions Avoid contact with eyes.

**Environmental Precautions** Refer to protective measures listed in Sections 7 and 8.

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Keep in suitable and closed containers for disposal. In case of rupture:. Dam up. Soak up with

inert absorbent material. Pick up and transfer to properly labeled containers.

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# 7. HANDLING AND STORAGE

Handling Handle in accordance with good industrial hygiene and safety practice. In case of rupture:.

Avoid contact with skin, eyes and clothing.

**Storage** Store in original container.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1,3-Dichloropropene 542-75-6	TWA: 1 ppm S*	(vacated) TWA: 1 ppm (vacated) TWA: 5 mg/m³ (vacated) S*	TWA: 1 ppm TWA: 5 mg/m³
Dichloromethane 75-09-2	TWA: 50 ppm	(vacated) S  TWA: 25 ppm (vacated) TWA: 500 ppm (vacated) STEL: 2000 ppm (vacated) Ceiling: 1000 ppm STEL: 125 ppm	IDLH: 2300 ppm

NIOSH IDLH: Immediately Dangerous to Life or Health

Engineering Measures Showers

Eyewash stations Ventilation systems

Personal Protective Equipment

Eye/Face Protection No special protective equipment required. Skin and Body Protection No special protective equipment required.

No information available

No information available

No information available

No information available

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

AppearanceClear, colorless solution.OdorWater.Odor ThresholdNo information availablePhysical StateLiquid

pH

Flash Point

**Decomposition Temperature** 

Melting Point/Range

Flammability Limits in Air

Fiammability Limits in Air

Water Solubility Liquid Evaporation Rate No information available

Evaporation Rate Vapor Density

Partition Coefficient: n-

octanol/water

le Physical State

Autoignition Temperature

Boiling Point/Range

**Explosion Limits** No information available

Solubility No information available

No information available

No information available

Vapor Pressure
VOC Content

No data available
Not applicable

### 10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions

Incompatible Products

None known based on information supplied

No data available

Conditions to Avoid None known based on information supplied

Hazardous Decomposition Products Carbon oxides.

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Hazardous Polymerization Hazardous polymerization does not occur

# 11. TOXICOLOGICAL INFORMATION

### **Acute Toxicity**

Product Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
3,5,7-Triaza-1-azoniatricyclodecane-	500 mg/kg (Rat)	565 mg/kg (Rabbit)	-
1-(3-chloro-2-propenyl)-, chloride			
Sodium Bicarbonate	4220 mg/kg (Rat)	-	-
Methenamine	9200 mg/kg (Rat)	=	-
1,3-Dichloropropene	57 mg/kg (Rat)	220 mg/kg (Rabbit)	2.7 mg/L (Rat)4 h
		336 mg/kg ( Rat )	5.2 mg/L ( Rat ) 1 h
Dichloromethane	2000 mg/kg (Rat)	-	76000 mg/m³(Rat)4 h

### **Chronic Toxicity**

Chronic Toxicity No known effect.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
1,3-Dichloropropene	A3	Group 2B	Reasonably Anticipated	X
Dichloromethane	A3	Group 2B Reasonably Anticipate		X

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Target Organ Effects None known

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# 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

The environmental impact of this product has not been fully investigated.

. Ecotoxicity effects of component substances.

Chemical Name	Toxicity to Algae	Toxicity to Fish	<b>Toxicity to Microorganisms</b>	Daphnia Magna (Water Flea)
Sodium Bicarbonate	h EC50 120 650 mg/L	LC50 8250 - 9000 mg/L		EC50 = 2350 mg/L 48 h
	_	Lepomis macrochirus 96 h		_
Methenamine		LC50= 49800 mg/L		EC50 = 36000 mg/L 48 h
		Pimephales promelas 96 h		_
1,3-Dichloropropene	h EC50 96 4.95 mg/L	LC50= 4.1 mg/L Pimephales	EC50 = 112 mg/L 5 min	EC50 = 0.09 mg/L 48 h
	_	promelas 96 h EC50 = 71.6 mg		EC50 = 6.15 mg/L 48 h
		LC50= 4.5 mg/L		
		Oncorhynchus mykiss 96 h		
		LC50= 6.1 mg/L Lepomis		
		macrochirus 96 h		
Dichloromethane	h EC50 96 >660 mg/L	LC50= 193 mg/L Lepomis	EC50 = 1 mg/L 24 h	EC50 = 140 mg/L 48 h
	_	macrochirus 96 h	EC50 = 2.88 mg/L 15 min	

Chemical Name	Log Pow
1,3-Dichloropropene	2.3
Dichloromethane	1.25

# 13. DISPOSAL CONSIDERATIONS

#### **Waste Disposal Methods**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

#### **Contaminated Packaging**

Dispose of in accordance with local regulations.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
1,3-Dichloropropene - 542-75-	waste number U084			U084
6				
Dichloromethane - 75-09-2	waste number U080	Included in waste streams:		U080
		F001, F002, F024, F025,		
		F039, K009, K010, K156,		
		K157, K158		

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Dichloromethane - 75-09-2	Category I - Volatiles		Toxic waste; (waste number F025); Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated	

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
1,3-Dichloropropene	Toxic; Ignitable
Dichloromethane	Toxic

# 14. TRANSPORT INFORMATION

**DOT** Not regulated

<u>TDG</u> Not regulated

MEX Not regulated

ICAO Not regulated

<u>IATA</u> Not regulated

IMDG/IMO Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

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# 15. REGULATORY INFORMATION

#### **International Inventories**

TSCA Exempt

**DSL** Does not Comply

**EINECS/ELINCS** Complies

**ENCS** Does not Comply

IECSCCompliesKECLCompliesPICCSCompliesAICSComplies

# **U.S. Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372: .

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
3,5,7-Triaza-1-azoniatricyclodecane-1-(3-chloro-2-propenyl)-	4080-31-3	0-0.05	1.0
, chloride			
1,3-Dichloropropene	542-75-6	0-0.001	0.1
Dichloromethane	75-09-2	0-0.001	0.1

#### SARA 311/312 Hazard Categories

Acute Health Hazard
No
Chronic Health Hazard
No
Fire Hazard
No
Sudden Release of Pressure Hazard
No
Reactive Hazard
No

#### **Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

O: :: :==::=/::				
Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
1,3-Dichloropropene				X

# Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:.

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Methenamine	100-97-0	0-0.005		Group I		
1,3-Dichloropropene	542-75-6	0-0.001	Present	Group II		
Dichloromethane	75-09-2	0-0.001	Present	Group I		

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):.

Chemical Name		Hazardous Substances RQs	Extremely Hazardous Substances RQs
1,3-Dich	loropropene	100 lb	
Dichloromethane		1000 lb	

### **U.S. State Regulations**

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#### **California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
1,3-Dichloropropene	542-75-6	Carcinogen
Dichloromethane	75-09-2	Carcinogen

### U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Methenamine		X			
1,3-Dichloropropene	X	X	X	X	X

### **International Regulations**

**Mexico - Grade** 

Minimum risk, Grade 0

Chemical Name	Carcinogen Status	Exposure Limits
Dichloromethane		Mexico: TWA= 100 ppm
		Mexico: TWA= 330 mg/m <sup>3</sup>
		Mexico: STEL= 1740 mg/m <sup>3</sup>
		Mexico: STEL= 500 ppm

#### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

#### **WHMIS Hazard Class**

Non-controlled

# **16. OTHER INFORMATION**

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Revision Note No information available

#### Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet** 

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