Product name: Gel Pack (GICP)

1. Identification

Product identifier:
Product Name: **Gel Pack (GICP).**

Other means of identification:
Synonyms: Freezer Pack

Recommended use and restrictions on use:
Recommended use: Gel Pack (GICP) is a gel pack, with a refrigerant gel that is designed to protect products from freezing or over-heating for the safe transport of food products, pharmaceuticals, and other medical products.
Recommended restrictions: Uses other than as recommended above.

Initial supplier identifier:

Company Name:	Cryopak Industries (2007) ULC	Cryopak Industries
Company Address:	11000, Parkway Blvd. Anjou, QC HIJ 1R6 Canada.	Delta, BC V3M 5V1 Canada
Company Telephone:	514-324-4720	604-515-7977
Company Contact Name	Jalal Balbal	
Company Contact Email	j.belbal@cryopak.com	

Emergency telephone number and any restrictions on the use of that number, if applicable: CANUTEC (24 Hours): 613.996.6666

2. Hazard identification

Classification of the chemical in accordance with Hazardous Products Regulations (WHMIS 2015):

Physical hazards
No physical hazards under GHS.

Health hazards
No health hazards under GHS.

Environmental hazards
Not adopted under WHMIS GHS

GHS Signal word: Not a hazardous substance or mixture**.**

GHS Hazard statement(s): Not applicable

GHS Hazard symbol(s): Not applicable

GHS Precautionary statement(s): Not applicable

Hazard(s) not otherwise Classified (HNOC): Material may cause slippery conditions if spilled.

Percentage of ingredient(s) of unknown acute toxicity:
Not applicable.

3. Composition/Information on ingredients

Mixture: Non-hazardous mixture of Sodium polyacrylate, cross linked and water, bagged in a polyethylene film.

Chemical name	CAS#	Concentration (weight %)
Sodium Polyacrylate	9003-04-7	< 2%

Note: The balance of the ingredients are not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Hazardous Products Regulations (WHMIS 2015).

4. First-aid measures

Description of necessary first-aid measures, subdivided according to the different routes of exposure (inhalation, ingestion, skin and eye contact):

Inhalation: Move to fresh air in case of accidental inhalation of vapors or decomposition products. If symptoms persist, call a physician.

Skin contact: Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.

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

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

Most important symptoms/effects, acute and delayed:
May cause slight eye irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Indication of immediate medical attention and special treatment needed, if necessary: If any symptoms are observed, contact a physician and give them this SDS sheet. Treat symptomatically.

5. Fire-fighting measures

Suitable and unsuitable extinguishing media:
Suitable extinguishing media: Not flammable. Use extinguishing media suitable for type of surrounding fire, such as foam, carbon dioxide, dry powder, water spray.
Unsuitable extinguishing media: Full water jet.

Specific hazards arising from the hazardous product, such as the nature of any hazardous combustion products:
Do not inhale explosion and/or combustion gases.
Hazardous combustion products include CO (Carbon Monoxide), CO2 (Carbon Dioxide).

Special protective equipment and precautions for fire-fighters: Wear self-contained breathing apparatus and protective clothing. Fight fire from a protected location. Wear self-contained breathing apparatus and protective clothing. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Forms slippery surfaces with water.Wear appropriate protective equipment, such as gloves, goggles and protective clothing, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Methods and materials for containment and cleaning:
May cause slippery conditions. Keep in suitable and closed containers for disposal. Soak up spillages with inert absorbent material. Pick up and transfer to properly labeled containers. Material is non-toxic and can be disposed of in landfill.

7. Handling and Storage

Precautions for safe handling: Use good personal hygiene practice. Do not inhale dust/fumes/aerosols. Avoid contact with eyes and skin. Use proper safety equipment at all times. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

Conditions for safe storage, including any incompatibles:
Keep containers closed in a dry, cool place.

8. Exposure controls/Personal protection

Control parameters, including occupational exposure limit values or biological limit values and the source of those values:

Canada. Alberta, Occupational Health and Safety Code		
Substance	**TWA**	**STEL**
Sodium Polyacrylate	None known	None known

Canada. British Columbia OELs		
Substance	**TWA**	**STEL**
Sodium Polyacrylate	None known	None known

Canada. Ontario OELs		
Substance	**TWA**	**STEL**
Sodium Polyacrylate	None known	None known

Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants		
Substance	**TWAEV**	**STEV**
Sodium Polyacrylate	None known	None known

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Individual protection measures, such as personal protective equipment:

Eye/face protection: None usually required. If risk assessment suggests otherwise, use safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and Hand protection: None usually required. If risk assessment suggests otherwise, handle with protective gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of

contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection: Respiratory protection is not required under normal conditions of use. In case of the formation of vapors or dust, use NIOSH approved filter apparatus containing Filter P1.

Other:
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Thermal hazards: None established.

9. Physical and chemical properties

Appearance (such as physical state and colour):	Paste/Gel, Liquid
Colour:	Clear.
Odour:	Odourless.
Odour threshold:	Not established
pH:	No data available
Melting point and freezing point:	No data available
Initial Boiling Point and boiling range:	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability (in the case of solids and gases):	Not applicable
Upper and lower flammability or explosive limits	
Flammability limit – lower %):	Not applicable
Flammability limit – upper (%):	Not applicable
Explosive limit – lower (%):	Not applicable
Explosive limit – upper (%):	Not applicable
Vapour pressure:	No data available
Vapour density (air=1):	No data available
Relative density (water = 1):	1.0 – 1.1
Solubility:	(Very hygroscopic)
Partition coefficient n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	Not established
Viscosity:	No data available

10. Stability and reactivity

Reactivity: Not reactive.
Chemical stability: Material is stable under normal conditions.
Possibility of hazardous reactions: Hazardous polymerization will not occur.
Conditions to avoid, including static discharge, shock or vibration: Avoid moisture.
Incompatible materials: Avoid contact with strong oxidizing agents.
Hazardous decomposition Products: If involved in a fire, oxides of carbon may be generated.

11. Toxicological information

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):

Inhalation: Inhalation is expected to be a principal route of entry.

Ingestion: Not an expected route of entry.

Skin: Skin contact is expected to be a principal route of entry.

Eyes: Eye contact is expected to be a principal route of entry.

Target Organ(s): Eyes, Skin, Respiratory system.

Symptoms related to the physical, chemical, and toxicological characteristics:
Slight eye irritation may occur. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Delayed and immediate effects and chronic effects from short or long-term exposure:
None expected.

Numerical measures of toxicity including ATEs:
Low toxicity for humans or animals under normal conditions of use.

Acute toxicity estimates:

Ingredient Information:

Substance	Test Type (species)	Value
Sodium Polyacrylate	LD_{50} Oral (Rat)	> 40,000 mg/kg
	LD_{50} Dermal (Rabbit)	No data available
	LC_{50} Inhalation (Mouse)	No data available

Skin corrosion/irritation: Not expected to cause skin irritation.

Serious eye damage/eye irritation: May cause eye irritation.

Respiratory sensitization: Not expected.

Skin sensitization: Not expected.

Germ cell mutagenicity: No information available on the mixture, however none of the components have been classified as causing germ cell mutagenicity (or are below the concentration threshold for classification).

Carcinogenicity: No information available on the mixture, however none of the components are listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.

Reproductive toxicity: No information available on the mixture, however none of the components have been classified as causing reproductive toxicity (or are below the concentration threshold for classification).

Specific target organ toxicity-Single exposure: No information available on the mixture, however none of the components have been classified as Specific target organ toxicity, single exposure (or are below the concentration threshold for classification).

Specific target organ toxicity-Repeat exposure: No information available on the mixture, however none of the components have been classified as causing Specific target organ toxicity, repeat exposure (or are below the concentration threshold for classification).

Aspiration hazard: No information available on the mixture, however none of the components have been classified as causing an aspiration (or are below the concentration threshold for classification).

12. Ecological information

Ecotoxicity (aquatic and terrestrial, if available):

Ingredient Information:

Substance	Test Type	Species	Value
Sodium Polyacrylate	LC_{50}	Fish - Leuciscus idus Fish - Danio rerio	> 5,500 mg/l – 96h > 4,000 mg/l – 96h
	EC_{50}	Daphnia magna	No data available
	EC_{50}	Microorganisms - Pseudomonas putida	> 6,000 mg/l – 24h

Persistence and Degradability:	No data available.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	Not established.
Other adverse effects:	No additional information available.

13. Disposal considerations

Information on safe handling for disposal and methods of disposal, including any contaminated packaging:

Product - This material, as supplied, is not a hazardous waste according to local regulations. 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. Contact a licensed professional waste to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

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Contaminated packaging - Contaminated packaging may contain residues of product. Dispose of in the same manner as product. Comply with applicable local, state or international regulations concerning solid or hazardous waste disposal and/or container disposal.

14. Transport Information

Canada TDG Transportation of Dangerous Goods Regulations (SOR/2001-286)

UN number:	Not regulated under TDG
United Nations proper shipping name as provided for in the United Nations Model Regulations:	Not applicable
Transport hazard class as provided in the United Nations Model Regulations:	Not applicable
Packing group as provided in the United Nations Model Regulations:	Not applicable

Maritime transport IMDG

UN number:	Not regulated under IMDG
United Nations proper shipping name as provided for in the United Nations Model Regulations:	Not applicable

Transport hazard class as provided in the United Nations Model Regulations:	Not applicable
Packing group as provided in the United Nations Model Regulations:	Not applicable

Air transport ICAO-TI and IATA-DGR

UN number:	Not regulated under IMDG
United Nations proper shipping name as provided for in the United Nations Model Regulations:	Not applicable
Transport hazard class as provided in the United Nations Model Regulations:	Not applicable
Packing group as provided in the United Nations Model Regulations:	Not applicable

Environmental hazards according to the International Maritime Dangerous Goods Code and the United Nations Model Regulations:
Marine pollutant: This material is not listed as a marine pollutant in the International Maritime Dangerous Goods Code.

Transport in bulk (according to Annex II of the *International Convention for the Prevention of Pollution From Ships, 1973*, as modified by the Protocol of 1978 (MARPOL 73/78) and the *International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk* (IBC Code)):
No further relevant information available.

Special precautions in connection with transport or conveyance either within or outside the premises.
None.

15. Regulatory Information

Safety, health and environmental regulations, made within or outside Canada, specific to the product in question.

CANADA:

Canada Domestic Substances List (DSL): Sodium polyacrylate is listed on the DSL.

Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that meet the human health criteria for categorization: Sodium polyacrylate (listed as 2-Propenoic acid, homopolymer, sodium salt).

Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Inherently Toxic to the Environment: Not listed

Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that Meets Environmental Criteria for Categorization: Not listed

Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Persistent to the environment: Sodium polyacrylate (listed as 2-Propenoic acid, homopolymer, sodium salt).

Canada National Pollutant Release Inventory (NPRI): No components are listed

Canada Toxicological Index Service - Workplace Hazardous Materials Information System – WHMIS

Component	Classification code
Sodium polyacrylate	D2B Toxic Material Causing Other Toxic Effects Moderate eye irritant
PRODUCT	Not classified

16. Other information

Date of the latest revision of the safety data sheet: Jan 18, 2019

DISCLAIMER: This document has been prepared in accordance with the SDS requirements of the Hazardous Products Regulations (WHMIS 2015). To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.