HAMPTON RESEARCH

MATERIAL SAFETY DATA SHEET

Date Updated: 10/22/2003

Section 1 - Product and Company Information

Product Name	CRYOPRO KIT
Product Number	HR2-132

Company	Hampton Research
Street Address	34 Journey
City, State, Zip, Country	Aliso Viejo, CA 92656-3317 USA
Technical Phone:	(949) 425-1321
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Section 2 - Composition/Information on Ingredient

Ingedient Names	CAS #	SARA 313
2,3-BUTANEDIOL	513-85-9	No
L-(+)-2,3-BUTANEDIOL	19132-06-0	No
DIMETHYL SULFOXIDE	67-68-5	No
MAGNESIUM ACETATE	16674-78-5	No
MESO-ERYTHRITOL	149-32-6	No
ETHANOL	64-17-5	No
ETHYLENE GLYCOL	107-21-1	Yes
D-(+)-GLUCOSE	14431-43-7	No
GLYCEROL	56-81-5	No
1,6-HEXANEDIOL	629-11-8	No
INOSITOL	87-89-8	No
LITHIUM ACETATE	6108-17-4	No
LITHIUM CHLORIDE	7447-41-8	No
LITHIUM FORMATE	6108-23-2	No
LITHIUM NITRATE	7790-69-4	No
LITHIUM SULFATE	10102-25-7	No
METHANOL	67-56-1	Yes
2-METHYL-2,4-PENTANEDIOL	107-41-5	No
NVH OIL	N/A	No
PARAFFIN OIL	8020-83-5	No
PARATONE-N	N/A	No
POLYETHYLENE GLYCOL 200	25322-68-3	No
POLYETHYLENE GLYCOL 400	25322-68-3	No
POLYETHYLENE GLYCOL 600	25322-68-3	No
POLYETHYLENE GLYCOL 4'000	25322-68-3	No
POLYVINYLPYRROLIDONE K15	9003-39-8	No
2-PROPANOL	67-63-0	Yes
PROPYLENE GLYCOL	57-55-6	No
D-(+)-RAFFINOSE	17629-30-0	No
SODIUM CHLORIDE	7647-14-5	No
SODIUM FORMATE	141-53-7	No
SODIUM MALONATE	141-82-2	No
SODIUM NITRATE	7631-99-4	No

D-(+)-SUCROSE	57-50-1	No
D-(+)-TREHALOSE	6138-23-4	No
XYLITOL	87-99-0	No

Please refer to the formulations sheet for exact formula composition.

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Flammable (USA) Highly Flammable (EU). Toxic.
Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. Irritating to eyes and skin. danger of very serious irreversible effects through inhalation, in Target organ(s): Eyes. Kidneys.

HMIS RATING
HEALTH: 2*
FLAMMABILITY: 3
REACTIVITY: 0

NFPA RATING
HEALTH: 2
FLAMMABILITY: 3
REACTIVITY: 0

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE
If swallowed, wash out mouth with water provided person is conscious. Call a physician. Do not induce vomiting.

INHALATION EXPOSURE
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE
In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

EYE EXPOSURE
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT
N/A

EXPLOSION LIMITS
N/A

AUTOIGNITION TEMP
N/A

FLAMMABILITY
N/A

EXTINGUISHING MEDIA
Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP
Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING
User Exposure: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE
Suitable: Keep tightly closed.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS
Use only in a chemical fume hood. Safety shower and eye bath.

PERSONAL PROTECTIVE EQUIPMENT
Respiratory: Government approved respirator.
Hand: Compatible chemical-resistant gloves.
Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance N/A
Physical State: Liquid

Property	Value	At Temperature or Pressure
Molecular Weight	N/A	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	N/A	

Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Surface Tension	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point	N/A
Explosion Limits	N/A
Flammability	N/A
Autoignition Temp	N/A
Refractive Index	N/A
Optical Rotation	N/A
Miscellaneous Data	N/A
Solubility	N/A

N/A = not available

Section 10 - Stability and Reactivity

STABILITY
Stable: Stable.
Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Sodium/sodium oxides.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE
Skin Contact: Causes skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: Causes eye irritation.
Inhalation: Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion: May be harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA
Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION
S: 24/25
Safety Statements: Avoid contact with skin and eyes.

US CLASSIFICATION AND LABEL TEXT
Indication of Danger: Irritant.
Risk Statements: Irritating to eyes, respiratory system and skin.
Safety Statements: Wear suitable protective clothing. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

UNITED STATES REGULATORY INFORMATION
SARA LISTED: No

CANADA REGULATORY INFORMATION
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: No
NDSL: No

Section 16 - Other Information

DISCLAIMER
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