

1. SUBSTANCE IDENTITY AND COMPANY INFORMATION

PRODUCT NAME:	Human Peripheral Blood Mononuclear Cells, Hepatitis C Virus		
CATALOG #:	PBMNC005C-HCV; PBMNC010C-HCV; PBMNC005F-HCV; PBMNC010F-HCV		
COMPANY INFORMATION:	FOR INFORMATION CALL:	530-626-7000	
StemExpress	AFTER HOURS CONTACT:	530-626-7000	
1743 Creekside Drive, Suite 200	CHEMTREC EMERGENCY:	800-424-9300	
Folsom, CA 95630			

2. HAZARDS IDENTIFICATION

GHS Symbol:  **Signal Word:** Biohazard

Health Hazards

For Biosafety Level 1

Handle as a potentially biohazardous material under at least Biosafety Level 1 containment.

The donor(s) have been screened for Hepatitis B, human immunodeficiency viruses or other adventitious agents, unless otherwise reported on the Certificate of Analysis. Regardless of results reported on the Certificate of Analysis Universal Precautions according to 29 CFR 1910.1030 should be followed at all times when handling product.

For Biosafety Level 2

Handle as a potentially biohazardous material under at least Biosafety Level 2 containment.

These human source materials are associated with human disease, hazards include: percutaneous injury, ingestion, mucous membrane exposure (U.S. Government Publication Biosafety in Microbiological and Biomedical Laboratories). The donor(s) have been screened for Hepatitis B, human immunodeficiency viruses or other adventitious agents, unless otherwise reported on the Certificate of Analysis. Regardless of results reported on the Certificate of Analysis Universal Precautions according to 29 CFR 1910.1030 should be followed at all times when manipulating these cell lines.

Host Range: Humans

Infectious Dose: Unknown

Mode of Transmission: Percutaneous exposure to contaminated blood and plasma derivatives; contaminated needles and syringes are important vehicles of spread, especially among injecting drug users.

Incubation Period: Ranges from 2 weeks to 6 months; most commonly 7 - 10 weeks; chronic infection may persist for up to 20 years before onset of cirrhosis or hepatoma.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is derived from a human source. Cells are shipped in liquid cell culture medium, a mixture of components that may include, but is not limited to: inorganic salts, vitamins, amino acids, carbohydrates and other nutrients dissolved in water. Frozen cultures contain a 10% solution of dimethyl sulfoxide (10% DMSO) as a cryoprotectant.

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This substance contains no ingredients at concentrations to be considered hazardous as defined by OSHA 29 CFR 1910.1200 however this product should be handled according to good lab practices, with proper personal protective equipment, proper engineering controls and within the parameters of the purchaser's chemical hygiene plan.

4. FIRST AID MEASURES

Report to your Safety Office and Seek Medical Attention Immediately

Surveillance: Monitor for symptoms

First Aid/ Treatment: Interferon alpha has been shown to have an overall beneficial effect in about 25% of chronic hepatitis cases; a combined treatment of ribavirin-interferon alpha has been reported to be equally effective or better than alpha interferon alone for treatment of chronic hepatitis.

Ingestion: If person is unconscious seek emergency medical attention; never give anything by mouth to an unconscious person. If the person is conscious wash mouth out with copious amounts of water and call a physician. Do not induce vomiting unless directed to do so by a physician.

Inhalation: If person is unconscious seek emergency medical attention, if person is conscious remove to fresh air and call a physician.

Dermal Exposure: Immediately wash skin with copious amounts of water followed by washing with soap and copious amounts of water. Remove all contaminated clothing.

Eye Exposures: Flush eyes with copious amounts of water for at least 15 minutes with eyelids separated and call a physician.

Puncture Wound: Wash thoroughly with soap and water. Allow to bleed freely. Call a physician.

5. FIRE FIGHTING MEASURES

General: Wear self-contained breathing apparatus in pressure demand, MSHA/NIOSH approved. During a fire, irritating and toxic gases may be generated by thermal decomposition.

Extinguishing Media: Water spray, carbon dioxide, dry chemical powder, Halon (where regulations permit), or appropriate foam.

Autoignition Temperature: N/A

Explosion Limits: N/A

Flash Point: Data not available

6. ACCIDENTAL RELEASE MEASURES

Use Personal Protective Equipment: Including chemical splash goggles, chemical resistant gloves, and appropriate clothing to prevent skin exposure. In addition, a respiratory protection program that complies with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Methods for Cleaning Up

Patient/Victim: Wash with soap and water. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Do not take clothing home.

Equipment/Environment: Allow aerosols to settle; wearing protective clothing, gently cover spill with paper towel and apply 1% sodium hypochlorite, starting at perimeter and working towards the center; allow sufficient contact time before clean-up (30 min).

Note: The use of additional PPE may be necessary for cleaning solutions.

7. HANDLING AND STORAGE

Spills: Allow aerosols to settle; wearing protective clothing, gently cover spill with absorbent paper towel and apply 1% sodium hypochlorite (effective for HBV), starting at perimeter and working towards the center; allow sufficient contact time (30 min-effective for HBV) before clean-up.

Disposal: Decontaminate before disposal; steam sterilization, chemical disinfection, incineration.

Storage: The infectious agent should be stored in leak-proof containers that are appropriately labeled.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

RISK GROUP CLASSIFICATION: Risk Group 2.

CONTAINMENT REQUIREMENTS: Biosafety Level 2 facilities, equipment, and operational practices for work involving infectious or potentially infectious material, animals, or cultures.

PROTECTIVE CLOTHING: Lab coat. Gloves when direct skin contact with infected materials or animals is unavoidable. Eye protection must be used where there is a known or potential risk of exposure to splashes.

OTHER PRECAUTIONS: General needle safety precautions important - do not bend, break or recap needles; dispose directly into puncture-proof container; universal precautions for blood.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Aqueous Liquid or Frozen

Freezing Point: No Data Available

Color: Not Available

Flash Point: No Data Available

pH: No Data Available

Ignition Temperature: No Data Available

Melting Point: No Data Available

Lower/Upper Explosion limit: No Data Available

Boiling Point: No Data Available

Water Solubility: No Data Available

10. STABILITY AND VIABILITY

Susceptibility to Disinfectants: General disinfection measures against hepatitis B virus are applicable to HCV (1% sodium hypochlorite, 70% ethanol, 2% glutaraldehyde, formaldehyde).

Physical Inactivation: General inactivation measures against hepatitis B virus are applicable to HCV (stable at 37°C for 60 min but not at temperatures above 60°C; stable at pH 2.4 for up to 6 hours). May not be inactivated by UV.

Survival Outside of Host: Not known. Suspected to be similar to hepatitis B virus (survives in dried blood for long periods-weeks).

11. TOXICOLOGICAL INFORMATION

Toxicity Data: Data not available

Sensitization of Product: Data not available

Effects of Short Term Exposure: Data not available

Chronic Exposure–Teratogen: Data not available

Effects of Long Term or Repeated Exposure: Data not available

Chronic Exposure–Mutagen: Data not available

Chronic Exposure–Reproductive Hazard: Data not available

No Information was found in relation to: RTECS, LD50/LC50, Carcinogenicity, Epidemiology, Teratogenicity, Reproductive effects, Mutagenicity, or Neurotoxicology.

Note: The toxicological properties of this substance have not been fully investigated.

12. LABORATORY HAZARD

Sources/ Specimens: Blood and blood products. Transmission through sexual and casual contact is not well documented.

Primary Hazards: Parenteral inoculation of blood and plasma products. Percutaneous (e.g. needle stick) exposures to HCV.

Special Hazards: Needle stick with infected blood.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Hazardous waste generators are required to determine if a discarded chemical is classified as a hazardous waste according to 40 CFR Part 261.3. In addition, waste generators must consult about and comply with all state and local regulations to ensure compliance.

14. TRANSPORT INFORMATION

For information on regulations regarding the transportation of etiologic agents and related materials, such as specimens for testing, please refer to regulations issued in the DOT's final rule "Hazardous Materials: Infectious Substances; Harmonization with the United Nations Recommendations" (49 CFR Parts 171–178; June 2, 2006). This rule augments and supersedes other rules established for other federal agencies for governing safe transport of infectious substances.

<https://www.cdc.gov/vaccines/pubs/surv-manual/appx/appendix24-etiological-agent.pdf>

15. REGULATORY INFORMATION

This substance is not listed on the TSCA Inventory. It is for research and development use only. This substance is not SARA listed.

US Federal Regulations: SARA 313: This product is not regulated by SARA CAA, Section 112, Hazardous Air Pollutants (HAPs) (40 CFR 61): This product does not contain HAPs.

US State Regulations: California Proposition 65: This product does not contain chemicals listed under Proposition 65.

16. OTHER INFORMATION

SUPPLEMENTAL REFERENCES:

BMBL: 5th Edition: <https://www.cdc.gov/biosafety/publications/bmb15/BMBL.pdf>

CDC: <https://www.cdc.gov/niosh/topics/bbp/>

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