MATERIAL SAFETY DATA SHEET

Effective Date: January 30, 2018 *DCN: QARA901.40|Revision: 1*

1. Substance Identity and Company Information

PRODUCT NAME: Human Whole Blood Vacutainer Tube, Human Immunodeficiency Virus

CATALOG #: PB010F-HIV; PB020F-HIV; PB030F-HIV; PB040F-HIV; PB050F-HIV; PB060F-HIV; PB070F-HIV; PB080F-HIV; PB090F-HIV; PB100F-HIV

COMPANY INFORMATION:
StemExpress
1743 Creekside Drive, Suite 200
Folsom, CA 95630

FOR INFORMATION CALL: 530-626-7000
AFTER HOURS CONTACT: 530-626-7000
CHEMTREC EMERGENCY: 800-424-9300

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: HIV is transmitted from person to person through direct exposure to infected body fluids (blood, semen) sexual contact; by using contaminated needles etc.; or from mother to infant during pregnancy, delivery or breastfeeding. There are no obvious differences in disease manifestations in individuals infected by mucosal versus blood-borne routes.

Incubation Period: Variable.

3. Composition/Information on Ingredients

This material is derived from a human source and may contain: sodium heparin; Ethylenediaminetetraacetic acid (EDTA); Anticoagulant Citrate Dextrose Solution A (ACD-A); citrate phosphate double dextrose adenine (CP2D-1); Streck.

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: AIDS must be managed as a chronic disease. Antiretroviral treatment is complex, involving a combination of drugs and resistance will appear rapidly if only a single drug is used.

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 and, while wearing protective clothing, gently cover the spill with paper towels and apply 1% sodium hypochlorite starting at the perimeter, working inwards towards the center. Allow sufficient contact time before clean up.

Disposal: Decontaminate all materials for disposal by steam sterilization, chemical disinfection, and/or incineration.

Storage: Infectious material should be stored in sealed, leak-proof containers that are appropriately labelled.

8. Exposure Controls and Personal Protection

RISK GROUP CLASSIFICATION: Risk Group 3.

CONTAINMENT REQUIREMENTS: Biosafety level 2 practices, containment equipment and facilities for activities involving clinical specimens and non-cultured procedures (primary containment devices may be indicated e.g. biological safety cabinets) and for activities involving non-human primates and any animals experimentally infected or inoculated with HIV; Biosafety level 3 practices, containment equipment and facilities for all work culturing HIV

PROTECTIVE CLOTHING: Solid-front gowns with tight-fitting wrists, gloves, and respiratory protection should be worn over laboratory clothing when infectious materials are directly handled.

OTHER PRECAUTIONS: All activities with infectious material should be conducted in a biological safety cabinet (BSC) or other appropriate primary containment device in combination with personal protective equipment. Centrifugation of infected materials must be carried out in closed containers placed in sealed safety cups, or in rotors that are unloaded in a biological safety cabinet. The use of needles, syringes, and other sharp objects should be strictly limited. Open wounds, cuts, scratches, and grazes should be covered with waterproof dressings. Additional precautions should be considered with work involving animals or large scale activities.

9. Physical and Chemical Properties

Physical State: Aqueous Liquid

Color: Red

pH: No Data Available

Melting Point: No Data Available

Boiling Point: No Data Available

Freezing Point: No Data Available

Flash Point: No Data Available

Ignition Temperature: No Data Available

Lower/Upper Explosion limit: No Data Available

Water Solubility: No Data Available

10. Stability and Viability

Susceptibility to Disinfectants: HIV is susceptible to fresh 2% glutaraldehyde, 2% Jodopax (detergent and iodine), hypochlorite, iodine, phenolics, and to a lesser extent 70% ethanol, NaOH and isopropanol.

Physical Inactivation: HIV is inactivated by ultraviolet (UV) light. HIV is easily inactivated in a cell free medium; however, in cell associated samples and blood samples complete inactivation requires much longer exposures to the UV source. HIV is also inactivated at pH higher or lower than the optimal level of 7.1. A temperature of 60°C for 30 minutes will likely inactivate HIV; however, higher temperatures and incubations may be required depending on the initial titre of the virus.

Survival Outside of Host: HIV can remain viable in blood in syringes at room temperature for 42 days. Although drying in the environment is known to cause a rapid reduction in HIV concentration, under experimental conditions, Cell-free HIV dried onto a glass coverslip in 10% serum can survive for longer than 7 days, depending on the initial titre.

11. Toxicological Information

Toxicity Data: Data not available

Effects of Short Term Exposure: Data not available

Effects of Long Term or Repeated Exposure: Data not available

Sensitization of Product: Data not available

Chronic Exposure–Teratogen: 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, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, peritoneal fluid, pleural fluid, pericardial fluid, amniotic fluid, other specimens containing visible blood, breast milk, unscreened or inadequately treated blood products, and infected human tissues.

Primary Hazards: Needlestick, contaminated sharp objects, and/or direct contact of non-intact skin or mucous membranes with HIV-infected specimens/tissue.

Special Hazards: Extreme care must be taken to avoid spilling and/or splashing infected materials. HIV should be presumed to be in/on all equipment and devices coming in direct contact with infected materials.

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-etiologic-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/bmbl5/BMBL.pdf

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

THE INFORMATION PRESENTED IN THIS DOCUMENT IS BELIEVED TO BE CORRECT BASED UPON DATA AVAILABLE TO STEMEXPRESS. USERS SHOULD MAKE AN INDEPENDENT DECISION REGARDING THE ACCURACY OF THIS INFORMATION BASED ON THEIR NEEDS AND DATA AVAILABLE TO THEM. ALL SUBSTANCES AND MIXTURES MAY PRESENT UNKNOWN HAZARDS AND ALL NECESSARY SAFETY PRECAUTIONS SHOULD BE TAKEN. STEMEXPRESS ASSUMES NO LIABILITY RESULTING FROM USING OR COMING IN CONTACT WITH THIS SUBSTANCE.

Intentionally Left Blank

COMPANY INFORMATION
StemExpress
1743 Creekside Drive, Suite 200
Folsom, CA 95630

FOR INFORMATION CALL: 530-626-7000
AFTER HOURS CONTACT: 530-626-7000
CHEMTREC EMERGENCY: 800-424-9300