



Safety Data Sheet

Section 1 – Product and Company Identification

Product Name: HIV-1 (IIIB Strain) Purified Virus, VPC

Applicable Product(s): 19-118-200

Manufacturer: Advanced Biotechnologies Inc
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Section 2 – Hazard Identification

I. Biohazards

Category: WHO Risk Group 3

Emergency Overview: Biohazardous

Pathogenicity: AIDS is characterized by symptoms and infections caused by the breakdown of the immune system due to HIV infection. HIV can infect many types of cells, mainly lymphocytes, but also macrophages, and microglia in the brain, and other neurological cells, resulting in profound asthenia, dementia and damage to the peripheral nervous system. Due to immunodeficiency, patients succumb to various fungi, parasites, bacteria, and/or viruses and are prone to certain tumors. Globally, *Mycobacterium tuberculosis* is the most common cause of death of HIV-infected individuals.

Potential Health Effects:

Effects: The clinical features of HIV infection vary depending on the stage of the disease. Acute infection is accompanied by non-specific “flu-like” and “mononucleosis-like” symptoms such as myalgia, arthralgia, diarrhea, nausea, vomiting, headache, hepatosplenomegaly, weight loss and neurological symptoms. Early-stage disease refers to the period of clinical latency between the time of the primary infection and the development of symptoms indicative of advanced immunodeficiency. Typically, when the patient’s CD4+ T-cell count falls below 500 cells/ μ l, syndromes indicative of depressed cell mediated immunity can appear. Examples include oropharyngeal and recurrent vulvovaginal candidiasis, bacillary angiomatosis, recurrent or multidermatomal herpes zoster, listeriosis, infections due to *Rhodococcus equi*, pelvic inflammatory disease, oral hairy leukoplakia associated with Epstein-Barr virus, cervical dysplasia, long lasting diarrhea, idiopathic thrombocytopenic purpura and peripheral neuropathy. Late-stage disease refers to the period when the patient’s CD4+ T-cell count falls below 200 cells/ μ l. The loss of the integrity of cell-mediated immune responses allows ubiquitous

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environmental organisms with limited virulence to become life threatening pathogens. Examples of conditions (as set out by the US Centers for Disease Control and Prevention) include candidiasis of bronchi, trachea, lungs or oesophagus, invasive cervical cancer, coccidioidomycosis, cryptococcosis, cryptosporidiosis, cytomegalovirus disease (other than liver, spleen or nodes) cytomegalovirus retinitis (with loss of vision), HIV-related encephalopathy, herpes simplex, histoplasmosis, isosporiasis, Kaposi's sarcoma, Burkitt's lymphoma, immunoblastic lymphoma, primary lymphoma of the brain, *Mycobacterium avium* complex, *Mycobacterium tuberculosis*, *Pneumocystis jirovecii* pneumonia, recurrent pneumonia, progressive multifocal leukoencephalopathy, recurrent salmonella septicaemia, toxoplasmosis of the brain and wasting syndrome due to HIV.

Host Range: Humans.

II. Chemical Hazards

Emergency Overview: No known OSHA hazards.

Routes of Entry: Skin contact, Eye contact, Inhalation, Ingestion

Potential Health Effects

Eyes: May cause eye irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Ingestion: May be harmful if swallowed.

Inhalation: May be harmful if inhaled.

Section 3 – Composition/Information on Ingredients

Name: Tris	CAS Number: 77-86-1
Name: Sodium Chloride	CAS Number: 7647-14-5
Name: EDTA	CAS Number: 60-00-4
Name: Human Immunodeficiency Virus Type 1	

Section 4 – First Aid Measures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Contact a physician.



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Skin Contact: Immediately wash skin with soap and plenty of water. Wash contaminated clothing before reuse. Contact a physician.

Inhalation: Move to fresh air. Contact a physician.

Ingestion: Wash out mouth with water provided person is conscious. Contact a physician.

Section 5 – Fire-Fighting Measures

Flammability of the Product: Unknown.

Extinguishing Media

Suitable: Use an extinguishing agent suitable for the surrounding fire.

Not Suitable: None known.

Section 6 – Accidental Release Measures

Personal Precaution: To minimize contact wear laboratory safety goggles, laboratory coat, and nitrile or latex gloves. Avoid breathing material.

Environmental precautions: Disinfect material before disposal.

Spill Containment: Take up with an absorbent material. Disinfect area with 3% hydrogen peroxide followed by 70% isopropyl alcohol.

Section 7 – Handling and Storage

Handling: As per the Biosafety in Microbiological and Biomedical Laboratories (BMBL), activities such as producing research-laboratory-scale quantities, manipulating concentrated virus preparations, and conducting procedures that may produce droplets or aerosols, are performed in a BSL-2 facility, using BSL-3 practices. Activities involving large-scale volumes or preparation of concentrated HIV are conducted at BSL-3.

Storage: -70°C or lower.



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Section 8 – Exposure Controls/Personal Protection

OSHA PEL/NIOSH REL: Contains no substances with occupational exposure limit values.

Ventilation: Work in a biological safety cabinet to reduce the possibility of exposure.

Respiratory Protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Hand Protection: Wear latex or nitrile gloves.

Eye Protection: Wear laboratory safety glasses or goggles.

Skin Protection: Wear a laboratory coat.

Section 9 – Physical and Chemical Properties

Appearance: Slightly whitish liquid.

Odor: Odorless.

Section 10 – Stability and Reactivity

Stability: No specific data.

Conditions to avoid: No specific data.

Materials to avoid: No specific data.

Hazardous Decomposition or By-Products: No specific data.

Section 11 – Toxicological Information

LD50: Unknown.

LC50: Unknown.

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Section 12 – Ecological Information

Ecological Information: Avoid release to the environment.

Section 13 – Disposal Considerations

Disposal Methods: This material is infectious and, as such, must be decontaminated before disposal. 1:256 Lysol I.C. or 10% bleach may be used for disinfection.

Section 14 – Transport Information

D.O.T.: Class 6, Division 6.2 (UN2814)

Proper Shipping Name: Infectious substance, affecting humans

IATA: Class 6, Division 6.2 (UN2814)

Proper Shipping Name: Infectious substance, affecting humans

Section 15 – Regulatory Information

U.S Federal Regulations

OSHA Hazard: Biohazardous

SARA 302/304/311/312 Extremely Hazardous Substances: N/A

SARA 313: N/A

Canada

WHMIS Classification: Class D, Division 3

International Regulations: WHO/HSE/GCR/2015.2: UN2814



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Section 16 – Other Information

The above information is believed to be accurate but does not purport to be all inclusive and shall be used only as a guide. Advanced Biotechnologies, Inc. shall not assume any liability whatsoever for the accuracy or 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 can not guarantee that these are the only hazards that exist.

Original document located at www.publichealth.gc.ca.

www.h-h-c.com