

**FOR RESEARCH USE ONLY. CAUTION:** Not intended for human diagnostic or therapeutic uses. Users should treat all human cells as potential pathogens. Wear protective clothing and eyewear. Practice appropriate disposal techniques for potentially pathogenic or bio-hazardous materials.

SECTION 1: IDENTIFICATION

**Product Name:** AnaBios Cryopreserved Human Hepatocytes

**Company:** AnaBios Corporation, San Diego Science Center, 3030 Bunker Hill Street, Suite 312, San Diego, CA 92109

**For Information About The SDS, Use This Department Contact Phone Number:** (858) 224-7360

SECTION 2: HAZARD(S) IDENTIFICATION

**Hazard Classification:** NA

**Signal Word(s):** NA

**Hazard Statements:** Contains refrigerated gas; may cause cryogenic burns or injury

**Pictograms:**



**Precautionary Statements:** Each donor is screened for viral DNA from HIV-1, HIV-2, HTLV I, HTLV II, hepatitis B, and hepatitis C and is confirmed to be non-reactive. No known test, however, can guarantee that the viruses that cause HIV-1, HIV-2, HTLV I, HTLV II, hepatitis B, and hepatitis C are absent. Because of their potential biohazardous nature, proper measures and biological containment should be taken when handling cells of human origin. BSL-2 (Biosafety Level 2) or higher should be used for all human-derived goods.

**Precautionary Statements:** 5-10% DMSO and/or 0-80% fetal bovine serum (FBS) may be present in frozen cultures, while 0-20% FBS may be present in live cell cultures. According to 21 CFR 1910.1200, fetal bovine serum is considered non-hazardous. Because worker sensitivity to animal-derived materials varies, AnaBios suggests that when utilizing these products, Good Laboratory Practices be followed, including the use of gloves, eye protection, and a lab coat. Dimethylsulfoxide (DMSO) may be absorbed through skin. May cause liver and kidney damage. Hygroscopic.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Cells extracted from human tissue, either frozen or alive. Liquid culture media is used to convey live cells (a mixture of components that may include, but not limited to: inorganic salts, vitamins, amino acids, carbohydrates and other nutrients dissolved in water). Frozen cultures are delivered in a solution containing 5-10% dimethyl sulfoxide on dry ice or liquid nitrogen (DMSO).

Chemical Name:	Synonym	CAS#	Conc.
Dimethyl Sulfoxide	DMSO	67-68-5	5-10%
Nitrogen, Refrigerated Liquid	LN2	67-68-5	5-10%

SECTION 4: FIRST-AID MEASURES

**After Skin Contact:** Flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

**After Eye Contact:** Rinse immediately with plenty of water and seek medical advice.

**After Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**After Swallowing:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

SECTION 5: FIREFIGHTING MEASURES

**Suitable Extinguishing Agents:** Any media suitable for surrounding fire. No unusual fire or explosion hazard.

**Special Protective Equipment for Firefighters:** Rinse immediately with plenty of water and seek medical advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Put on appropriate personal protective equipment

**Measures for Environmental Protection:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Measures for Cleaning/Collecting:** Immediately contain the spill and disinfect it with a strong sodium hypochlorite solution (bleach). The amount of bleach used should not be less than 10% of the total spill volume. Allow at least 10 minutes for the neutralizing process to complete. Using appropriate absorbent materials, absorb the spill. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

SECTION 7: HANDLING & STORAGE

**Handling:** Keep tightly closed when not in use.

**Storage:** Suitable for most general chemical storage areas.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**General Protective & Hygienic Measures:** Wash hands and other exposed areas thoroughly with mild soap and water before eating, drinking and when leaving the laboratory. Wash contaminated clothing before reuse.

**Breathing Equipment:** No respiratory protection will be needed under normal Good Laboratory Practices operating conditions.

**Protection of Hands:** Compatible chemical resistance gloves should be the minimum hand protection.

**Eye Protection:** Chemical safety goggles/glasses should be the minimum eye protection.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

**Form:** Yellowish-brown liquid or clear to reddish liquid

SECTION 10: STABILITY & REACTIVITY

**Reactivity:** Stable under normal conditions of use and storage

**Chemical Stability:** Stable

SECTION 11: TOXICOLOGICAL INFORMATION

Not applicable

SECTION 12: ECOLOGICAL INFORMATION (NON-MANDATORY)

Data not yet available

SECTION 13: DISPOSAL CONSIDERATIONS (NON-MANDATORY)

Observe all federal, state and local environmental regulations.

SECTION 14: TRANSPORT INFORMATION (NON-MANDATORY)

This substance is considered to be non-hazardous for ground or air transport.

SECTION 15: REGULATORY INFORMATION (NON-MANDATORY)

Not applicable

SECTION 16: EXPOSURE CONTROLS/PERSONAL PROTECTION

For research use only. Not for clinical, drug, household or other uses. The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AnaBios shall have no liability for any direct, indirect, consequential or incidental damages arising out of the use, the results of use, the inability to use, the handling or contact with this product.eating, drinking and when leaving the laboratory. Wash contaminated clothing before reuse.

**SDS Date of Preparation/Update:** June 22, 2023