

SAFETY DATA SHEET (SDS)

CRYOVIVE™ (2% or 5% DMSO)

(as formulated, components are not known to represent any transportation or health hazards)

SDS date: 03-13-2023

SECTION 1: COMPANY AND PRODUCT IDENTIFICATION / INFORMATION

PRODUCT NAME: CRYOVIVE™ 50 mls; with 5 or 2% (vol./vol.) Dimethyl Sulfoxide (DMSO)
SYNONYMS: None
PRODUCT CODES: AVBP-001 (5% DMSO) or AVBP-090 (2% DMSO)
PRODUCT USE: Liquid medium for the low to ultra low temperature (e.g. -76.8 °C to -196 °C) cryopreservation and storage of biological material (e.g., animal cells or tissue).

MANUFACTURER: AvantBio Corporation
MAILING ADDRESS: PO Box 5820, Lynnwood, WA 98046 USA
PHONE: +1 (206) 823-5895
EMAIL: info@avantbio.com
WEB: www.avantbio.com

PHYSICAL ADDRESS: AvantBio Corporation
8013 NE St. Johns Rd.
Unit E
Vancouver WA 98665 USA

SECTION 2: INFORMATION OF ANY KNOWN HAZARDOUS INGREDIENTS

INGREDIENT: Contains Dimethyl Sulfoxide (DMSO) at 2 or 5% final concentration (vol./vol.), in an aqueous physiological-buffered saline solution. DMSO CAS NO: 67-68-5. MF: C₂H₆O_S. For further information refer to a DMSO MSDS, such as that provided by Sigma-Aldrich, for product. Cat. No. D1435-500ML

SECTION 3: HAZARDS IDENTIFICATION

HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 0

CRYOVIVE™ contains no substances, which, at the formulated concentrations, have been shown to be hazardous to health. Handle in accordance with good industrial hygiene and safety practice and environmental exposure regulations.

ENGINEERING CONSIDERATIONS: Ensure adequate ventilation, especially in confined areas
RESPIRATORY PROTECTION: In case of insufficient ventilation wear suitable respiratory equipment
HAND PROTECTION: Protective gloves
EYE PROTECTION: Safety glasses with side-shields
SKIN AND BODY PROTECTION: Lightweight protective clothing
EXPOSURE LIMITS: Not known
CARCINOGENICITY: Not known. Components of CRYOVIVE™ are not known to be carcinogenic at the formulated concentrations

SECTION 4: FIRST AID MEASURES

EYES: Rinse eyes thoroughly with water and promptly seek medical advice and care.
SKIN: Wash with soap and water, rinse with water and promptly seek medical advice and care.
INGESTION: Rinse mouth with water and promptly seek medical advice and care.
INHALATION: Move exposed individual to well ventilated, uncontaminated area and promptly seek medical advice and care.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: CRYOVIVE™ contains 5 or 2% DMSO (vol./vol.). Treat exposed individual both symptomatically and accordingly.

SECTION 5: FIRE-FIGHTING INFORMATION

FLAMMABILITY: CRYOVIVE™ is non-flammable and non-explosive. Use standard fire-fighting measures such as water, carbon dioxide (CO₂). Foam dry powder or alcohol-resistant foams.

SECTION 6: ACCIDENTAL RELEASE INFORMATION

ACCIDENTAL RELEASE AND CLEANUP: General non-hazardous chemical spill clean up measures should be employed. Use appropriate protocols and protective equipment during cleanup. Soak up spill with absorbent material.

SECTION 7: HANDLING AND STORAGE HANDLING: Use standard caution and safety measures as well as good laboratory practices when using CRYOVIVE™. Wear appropriate protective laboratory clothing and equipment. Avoid ingestion, contact with skin or eyes, or inhalation of vapors or aerosols. Wash thoroughly after handling.

STORAGE: Store between 2–8 °C in the dark. Store in accordance with federal, state, and local law and regulations. Do not smoke, consume food or beverages in areas where you are using CRYOVIVE™. Do not freeze (i.e. less than 0 °C)

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION INFORMATION

INDUSTRIAL HYGIENE: Handle in accordance with good industrial hygiene and safety practice and environmental exposure controls.

ENGINEERING CONSIDERATIONS: Ensure adequate ventilation, especially in confined areas

RESPIRATORY PROTECTION: In case of insufficient ventilation wear suitable respiratory equipment

HAND PROTECTION: Protective gloves

EYE PROTECTION: Safety glasses with side-shields

SKIN AND BODY PROTECTION: Lightweight protective clothing

EXPOSURE LIMITS: Not known

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, faint-yellow viscous liquid

ODOR: Faint odor of sulfur

PHYSICAL STATE: Liquid

pH AS SUPPLIED: Approx. 7.4

BOILING POINT: Not known

MELTING POINT: Not known

FREEZING POINT: Not known

SOLUBILITY IN WATER: Soluble in water

PERCENT SOLIDS BY WEIGHT: NA

PERCENT VOLATILE: Not known

VOLATILE ORGANIC COMPOUNDS: None

VAPOR PRESSURE: Not known

VAPOR DENSITY: Not known

SPECIFIC GRAVITY: Approx. 1.5

EVAPORATION RATE: Not known

SECTION 10: STABILITY AND REACTIVITY

POLYMERIZATION HAZARD: NA

STABILITY: Stable and not known to be reactive. However, storage and use of product at increased temperatures greater than 25°C or near ignition sources is not recommended.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with strong acids or bases, reducing agents or oxidizing agents.

POTENTIAL HAZARDOUS DECOMPOSITION PRODUCTS: Sulfur oxides, carbon dioxide, and carbon monoxide

SECTION 11: TRANSPORT AND SHIPPING INFORMATION

U.S. D.O.T. SHIPPING NAME: CRYOVIVE™

D.O.T. HAZARD CLASS: NA. CRYOVIVE™, as formulated, is not known to represent a transportation hazard.

SECTION 12: REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61) This product does not contain HAPs.

U.S. State Regulations

California Proposition 65

This product does not contain chemicals listed under Proposition 65

WHMIS Hazard Class
Non-controlled

This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR

SECTION 13: ECOLOGICAL INFORMATION

Ecotoxicity effects	No information available.
Mobility	No information available.
Biodegradation	Inherently biodegradable
Bioaccumulation	Does not bioaccumulate.

SECTION 14. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

SECTION 15: MISCELLANEOUS INFORMATION AND DISCLAIMER

The information included in this SDS is specifically-related to CRYOVIVE™ only, and is not relevant to CRYOVIVE™ that is utilized in any downstream non-recommended processes or the non-recommended use of CRYOVIVE™ with other materials or substances. This information included in this SDS is, to the best of our knowledge, accurate. However, AvantBio Corporation claim no warranty or assurances regarding the accuracy of this SDS, and assumes no liability from its use. Recipients of CRYOVIVE™ should make their own determinations regarding the accuracy and use of the information contained herein.