



MATERIAL SAFETY DATA SHEET

CryoStor™ CS-5

MSDS DATE: 05/01/2005

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CryoStor CS5
SYNONYMS: CryoStor, CS5
PRODUCT CODES: 61020

MANUFACTURER: BioLife Solutions Inc.
ADDRESS: 171 Front Street, Owego, NY 13827

EMERGENCY PHONE: (866) 4BIOLIFE
OTHER CALLS: (607) 687-4487
FAX PHONE: (607) 687-6683

PRODUCT USE: Ultra low temperature (-70 to -196°C) storage of biological material (cells and tissues)

SECTION 2: COMPOSITION/INFORMATION ON KNOWN HAZARDOUS INGREDIENTS

INGREDIENT:
Dimethyl Sulfoxide (DMSO)
CAS NO.: 67-68-5 MF.: C₂H₆OS % Vol.: 5% (vol./vol.)
For further information refer to DMSO MSDS – Spectrum Laboratory Products Inc. (Cat.# D1258)

SECTION 3: HAZARDS IDENTIFICATION

ROUTES OF ENTRY: Oral, Skin, Eyes

POTENTIAL HEALTH EFFECTS
EYES: NA
SKIN: NA
INGESTION: Nausea
INHALATION: NA

ACUTE HEALTH HAZARDS: NA
CHRONIC HEALTH HAZARDS: NA

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Not known

CARCINOGENICITY: None of the components at concentrations equal or greater than 0.1% are listed by NTP, IARC, or OSHA as a carcinogen. To the best of our knowledge, the chemical, physical, toxicological, and carcinogenic properties of DMSO have not been thoroughly investigated

SECTION 4: FIRST AID MEASURES

EYES: Flush with running water for >10 min
SKIN: Wash skin thoroughly with soap and water. Wash contaminated clothing before reuse.
INGESTION: If swallowed, give two glasses of water and induce vomiting. Never give anything to an unconscious person. Call a physician.
INHALATION: NA

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:
HypoThermosol is intended for low temperature preservation of cells and tissues

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY: Non-Flammable
METHOD USED: NA
EXTINGUISHING MEDIA: Use any suitable media for extinguishing material supporting the fire

SPECIAL FIRE FIGHTING PROCEDURES: Standard measures apply
UNUSUAL FIRE AND EXPLOSION HAZARDS: Not a fire or explosion hazard

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SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Standard non-hazardous chemical spill clean up measures apply. Use appropriate protective equipment during cleanup. Soak up spill with absorbent material.

SECTION 7: HANDLING AND STORAGE

HANDLING: Use good laboratory practices while handling. Avoid inhaling vapors or mist. Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling.

STORAGE: Store between 2-8°C in the dark. Store in accordance with federal, state, and local regulations. Do not consume food, drink, or tobacco in areas where they may become contaminated with this material. Do not freeze solution.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: NA

VENTILATION: NA

RESPIRATORY PROTECTION: This material does not have established workplace exposure limits. Wear an appropriate NIOSH/MSHA approved air purifying respirator or positive pressure air supplied respirator in situations where a respirator is judged appropriate to prevent inhalation of vapors or mist.

EYE PROTECTION: Chemical laboratory safety goggles or as recommended by internal laboratory

SKIN PROTECTION: Rubber gloves or as recommended by internal laboratory

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear impervious clothing such as apron, boots, jumpsuit, or whole body suit as appropriate to avoid exposure

WORK HYGIENIC PRACTICES: Use good laboratory precautions and practices. Wash hands following handling of material

EXPOSURE GUIDELINES: Wash exposed area thoroughly. Refer to Section 4 First Aid Measures for details

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear liquid
ODOR: Slight Odor
PHYSICAL STATE: Liquid
pH AS SUPPLIED: 7.4 - 7.6
BOILING POINT: NA
MELTING POINT: 0°C
FREEZING POINT: -4°C
VAPOR PRESSURE (mmHg): NA
VAPOR DENSITY (AIR = 1): NA
SPECIFIC GRAVITY (H₂O = 1): NA
EVAPORATION RATE: NA
SOLUBILITY IN WATER: Soluble
PERCENT SOLIDS BY WEIGHT: NA
PERCENT VOLATILE: NA
VOLATILE ORGANIC COMPOUNDS (VOC): None

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable
CONDITIONS TO AVOID (STABILITY): Storage and use of product at elevated temperatures >22°C
INCOMPATIBILITY (MATERIAL TO AVOID): Acid chlorides, phosphorous halides, strong acids, strong oxidizing agents, strong reducing agents
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: carbon monoxide, carbon dioxide, sulphur oxides
HAZARDOUS POLYMERIZATION: NA
CONDITIONS TO AVOID (POLYMERIZATION): NA

SECTION 11: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Disposal with non-hazardous materials. Observe all federal, state, and local environmental regulations

SECTION 12: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION
PROPER SHIPPING NAME: CryoStor®
HAZARD CLASS: NA

SECTION 13: OTHER INFORMATION

OTHER INFORMATION: The data on this material safety data sheet relates only to the specific material herein and does not relate to use in combination with any other material or process.

PREPARATION INFORMATION: This information is believed to be accurate and represents the best information available to date.

DISCLAIMER: We make no warranty or assume liability from its use. Users should make their own investigations to determine the suitability of the information.