

Date prepared: Mar 30, 2026

SAFETY DATA SHEET (SDS)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: BAMBANKER DMSO free
Supplier
Company name: GC Lymphotec Inc.
Department in charge: Reagent Manufacturing Division, Regenerative Medical Manufacturing Department
Address: 18-4 Fuyuki, Koto-ku, Tokyo, Japan
Emergency telephone number: +81-3-3630-2530
Recommended use and limitations on use: Cell freeze-preservation solution

2. HAZARDS IDENTIFICATION

GHS classification (mixture)

Health hazards

Specific target organ toxicity (single exposure):
Category 1 (central nervous system, respiratory system); Category 3 (narcotic effects)
Specific target organ toxicity (repeated exposure):
Category 1 (central nervous system, respiratory system)

GHS pictograms



Signal word: Danger

Hazard statements

H370: Causes damage to organs
H372: Causes damage to organs through prolonged or repeated exposure
H336: May cause drowsiness or dizziness

Precautionary statements (Prevention)

P260: Do not breathe dust/fume/gas/mist/vapors/spray
P264: Wash face, hands, and any exposed skin thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P271: Use only outdoors or in a well-ventilated area

Precautionary statements (Response)

P304+P340: If inhaled: Remove person to fresh air and keep comfortable for breathing

P308+P311: If exposed or concerned: Call a physician

P312, P314: If you feel unwell: Call a physician

P321: Specific treatment is required (see Section 4 of this SDS for first aid measures)

Precautionary statements (Storage)

P403+P233: Store in a well-ventilated place. Keep container tightly closed

P405: Store locked up

Precautionary statements (Disposal)

P501: Dispose of contents/container in accordance with local/regional/national regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

Single substance or Mixture: Mixture

Chemical name	CAS No.	CSCL No.	ISHA No.	Weight (%)
1,2- Propanediol (Propylene glycol)	57-55-6	(2)-234	2-(8)-321 2-(8)-323	20%
Bovine serum albumin	9048-46-8	N/A	N/A	≤80%
Medium component	N/A	N/A	N/A	≤10%

CSCL: Act on the Regulation of Manufacture and Evaluation of Chemical Substances

ISHA: Industrial Safety and Health Act

Harmful ingredients classified under GHS classification

Health hazard symbol applicable ingredient: 1,2- Propanediol (Propylene glycol)

4. FIRST AID MEASURES

Inhalation

Remove the victim to fresh air and try to keep them at rest and warm. If symptoms persist, seek medical advice or care.

Skin contact

Wash thoroughly with soap and plenty of water immediately. If symptoms persist, seek medical advice or care.

Eye contact

Wash thoroughly with plenty of water immediately. If symptoms persist, seek medical advice or care.

Ingestion

Rinse mouth. Do NOT induce vomiting. Seek medical advice or care immediately.

5. FIRE-FIGHTING MEASURES

Extinguishing media

In case of fire, use foam, alcohol-resistant foam, powder, carbon dioxide, or water.

Specific hazards

Since it generates irritating or toxic gas in case of fire, wear appropriate protective equipment to avoid inhaling smoke when extinguishing fire.

Recommendations for firefighters

Special firefighting procedures

Remove combustion sources at the origin of a fire and extinguish with fire-extinguishing media.

Promptly transfer movable containers to a safe place.

If it cannot be moved, cool down the surrounding area by spraying water.

Protection of firefighters

Firefighting should be done from the upwind side, while avoiding inhaling toxic gas.

Wear a respiratory protector depending on the situation.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

When indoors, ventilate thoroughly until the handling is completed. Prohibit unnecessary people from entering the leakage site. Wear appropriate protective equipment when working to avoid splashes adhering to the skin and inhalation of gas. Perform fire-extinguishing work from the upwind side and evacuate anyone who is downwind.

Environmental precautions

Do not let the leaked product flow into rivers, etc. where it could cause environmental harm. Do not discharge contaminated wastewater to the environment without proper treatment.

Methods and materials for containment and cleanup

Collect the leaked liquid in a container that can be sealed by adsorbing it using rags, dust-cloths, or soil.

7. HANDLING AND STORAGE

Handling

Technological countermeasures

Wear appropriate protective equipment to avoid inhalation and contact with the eyes, skin and clothing.

Storage

Proper storage condition:

Avoid direct sunlight, and store in a cool, dark place (2–10°C).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Equipment countermeasures

Handle in a place with adequate ventilation, provide a handwashing facility nearby, and display its location clearly.

Exposure limit

Acceptable concentration determined by the Japan Society for Occupational Health: No data available.

Personal protective equipment

Respiratory protection

Wear a protective mask depending on the situation.

Hand protection

Wear protective gloves depending on the situation.

Eye protection

Wear protective glasses depending on the situation.

Skin and body protection

Wear long-sleeved work clothes depending on the situation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Yellow, clear liquid
Odor	Slight characteristic odor
Melting point/freezing point	No data available
Boiling point, initial boiling point and boiling range	No data available
Flammability	No data available
Evaporation rate	No data available
Combustibility	No data available
Lower and upper explosion limits / flammability limits	No data available
Flash point	No data available
pH	7.0–7.7
Viscosity (dynamic viscosity)	No data available
Kinematic viscosity	No data available
Solubility	Soluble in water
Partition coefficient (n-octanol/water)	No data available
Vapor pressure	No data available

Density and/or relative density	No data available
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Relative vapor density	No data available
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Particle characteristics	No data available
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10. STABILITY AND REACTIVITY

Chemical stability

It is stable at the recommended storage temperature.

Reactivity

It turns red when released to the atmosphere.

Hazardous reactions

No hazardous reactions occur in normal handling.

Conditions to avoid

Extremes temperature and direct sunlight.

Incompatible materials

No data available

Hazardous decomposition products

No data available

11. TOXICOLOGICAL INFORMATION

NITE: National Institute of Technology and Evaluation (Japan)

Acute toxicity (Oral):	1,2- Propanediol (Propylene glycol) rat LD50=8,000-46,000 mg/kg (NITE GHS classification)
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Acute toxicity (Dermal):	1,2- Propanediol (Propylene glycol) rabbit LD50=20,800 mg/kg (NITE GHS classification)
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Acute toxicity (Inhalation: Gas/Vapor/ Dust/Mist):	No data available
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Skin Corrosion/Irritation:	No data available
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Serious Eye Damage/Eye Irritation:	No data available
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Respiratory Sensitization:	No data available
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Skin Sensitization:	No data available
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Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive Toxicity:	No data available
Specific target organ toxicity (single exposure):	1,2- Propanediol (Propylene glycol) Category 1 (central nervous system, respiratory system) Category 3 (narcotic effects) (NITE GHS classification)
Specific target organ toxicity (repeated exposure):	1,2- Propanediol (Propylene glycol) Category 1 (central nervous system, respiratory system) (NITE GHS classification)
Aspiration hazard:	No data available

12. ECOLOGICAL INFORMATION

NITE: National Institute of Technology and Evaluation (Japan)

METI: Ministry of Economy, Trade and Industry (Japan)

Hazardous to the Aquatic Environment – Short-Term (Acute): 1,2- Propanediol (Propylene glycol)
Algae (*Pseudokirchneriella subcapitata*)
72 h EC50 > 1,000 mg/L
Crustaceans (*Daphnia magna*)
48 h EC50 > 1,000 mg/L
Fish (*Oryzias latipes*)
96 h EC50 > 100 mg/L
(NITE GHS classification)

Hazardous to the Aquatic Environment – Long-Term (Chronic): 1,2- Propanediol (Propylene glycol)
Readily Biodegradable (Mean biodegradation: 90% by BOD)
Algae (*Pseudokirchneriella subcapitata*)
72 h NOEC=1,000 mg/L
Crustaceans (*Daphnia magna*)
21 day NOEC=1,000 mg/L
(NITE GHS classification)

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Hazard to the ozone layer: No data available

13. DISPOSAL CONSIDERATIONS

Contents and containers shall be disposed of in accordance with appropriate laws and regulations of the region, country, or local site.

14. TRANSPORT INFORMATION

UN number is not applicable.

15. REGULATORY INFORMATION

Japanese regulations

Fire Service Act: Not applicable

Poisonous and Deleterious Substances Control Act: 1,2- Propanediol (Propylene glycol)
Dangerous and Harmful Substances to be Labeled
Article 57-1
Dangerous or Harmful Substances to be Notified
Article 57-2

Industrial Safety and Health Act: Not applicable

Regulations for the Carriage and Storage of Dangerous Goods by Ship: Not applicable

Civil Aeronautics Act: Not applicable

Pollutant Release and Transfer Register (PRTR) Law: Not applicable

Export Trade Control Order: Not applicable

16. OTHER INFORMATION

Disclaimer

The contents described in this SDS do not cover all the information, but are based on the materials, information and data available at the present time. When new information is obtained, the contents of this SDS may be added or corrected.

The precaution statements are for normal handling. For special handling, please handle after taking safety measures suitable for the dosage and administration.

The basis for calculating the GHS classification category is the data published in Japan at the present time (NITE, 2019).
