

Date prepared: Mar 30, 2026

## SAFETY DATA SHEET (SDS)

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### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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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  
(For research use only)

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### 2. HAZARDS IDENTIFICATION

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#### 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 label elements

##### Pictogram



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

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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

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3. COMPOSITION/INFORMATION ON INGREDIENTS

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**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)

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4. FIRST AID MEASURES

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**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.

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## 5. FIRE-FIGHTING MEASURES

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### **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.

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## 6. ACCIDENTAL RELEASE MEASURES

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### **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.

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## 7. HANDLING AND STORAGE

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### **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).

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### **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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

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

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### **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

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## 11. TOXICOLOGICAL INFORMATION

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**NITE:** National Institute of Technology and Evaluation (Japan)

<b>Acute toxicity (Oral):</b>	1,2- Propanediol (Propylene glycol) rat LD <sub>50</sub> = 8,000-46,000 mg/kg (NITE GHS classification)
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<b>Acute toxicity (Dermal):</b>	1,2- Propanediol (Propylene glycol) rabbit LD <sub>50</sub> = 20,800 mg/kg (NITE GHS classification)
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<b>Acute toxicity (Inhalation: Gas/Vapor/ Dust/Mist):</b>	No data available
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<b>Skin Corrosion/Irritation:</b>	No data available
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<b>Serious Eye Damage/Eye Irritation:</b>	No data available
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<b>Respiratory Sensitization:</b>	No data available
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<b>Skin Sensitization:</b>	No data available
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<b>Germ cell mutagenicity:</b>	No data available
<b>Carcinogenicity:</b>	No data available
<b>Reproductive Toxicity:</b>	No data available
<b>Specific target organ toxicity (single exposure):</b>	1,2- Propanediol (Propylene glycol) Category 1 (central nervous system, respiratory system) Category 3 (narcotic effects) (NITE GHS classification)
<b>Specific target organ toxicity (repeated exposure):</b>	1,2- Propanediol (Propylene glycol) Category 1 (central nervous system, respiratory system) (NITE GHS classification)
<b>Aspiration hazard:</b>	No data available

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## 12. ECOLOGICAL INFORMATION

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**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 EC<sub>50</sub> > 1,000 mg/L  
Crustaceans (*Daphnia magna*)  
48 h EC<sub>50</sub> > 1,000 mg/L  
Fish (*Oryzias latipes*)  
96 h EC<sub>50</sub> > 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

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### 13. DISPOSAL CONSIDERATIONS

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

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### 14. TRANSPORT INFORMATION

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UN number is not applicable.

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### 15. REGULATORY INFORMATION

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#### **Japanese regulations**

<b>Fire Service Act:</b>	Not applicable
<b>Poisonous and Deleterious Substances Control Act:</b>	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
<b>Industrial Safety and Health Act:</b>	Not applicable
<b>Regulations for the Carriage and Storage of Dangerous Goods by Ship:</b>	Not applicable
<b>Civil Aeronautics Act:</b>	Not applicable
<b>Pollutant Release and Transfer Register (PRTR) Law:</b>	Not applicable
<b>Export Trade Control Order:</b>	Not applicable

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### 16. OTHER INFORMATION

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#### **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, 2018).

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