Date prepared: Mar 17, 2026

SAFETY DATA SHEET (SDS)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name:	BAMBANKER
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)

2. HAZARDS IDENTIFICATION

GHS classification (mixture)

Health hazards
Specific target organ toxicity (single exposure): Category 2 (respiratory system)

GHS label elements
Pictogram

Signal word: Warning

Hazard statements
H371: May cause damage to the organs (respiratory system)

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

Precautionary statements (Response)
P308+P311: If exposed or concerned: Call a physician

Precautionary statements (Storage)
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 (%)
Dimethyl Sulfoxide	67-68-5	(2)-1553	*	10%
Bovine serum albumin	9048-46-8	N/A	N/A	≤80%
Medium component	N/A	N/A	N/A	≤10%

*****Publicly disclosed chemical substance
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: Dimethyl Sulfoxide

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 **s**ealed 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 (2–10ºC).

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	None
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	7.0–7.4
Viscosity (dynamic viscosity)	No data available
Kinematic viscosity	No data available
Solubility	No data available
Partition coefficient (n-octanol/water)	No data available
Vapor pressure	No data available

Density and/or relative density	No data available
Relative vapor density	No data available
Particle characteristics	No data available

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):	Dimethyl Sulfoxide rat LD_{50} = 14,500 mg/kg (NITE GHS classification)
Acute toxicity (Dermal):	Dimethyl Sulfoxide rat LD_{50} = 40,000 mg/kg (NITE GHS classification)
Acute toxicity (Inhalation: Gas/Vapor):	No data available
Acute toxicity (Inhalation: Dust/Mist):	Dimethyl Sulfoxide rat 4 h LD_{50} > 5,330 mg/m^3 (NITE GHS classification)
Skin Corrosion/Irritation:	No data available
Serious Eye Damage/Eye Irritation:	No data available

Respiratory Sensitization:	No data available
Skin Sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive Toxicity:	No data available
Specific target organ toxicity (single exposure):	Dimethyl Sulfoxide Category 2 (respiratory system) (NITE GHS classification)
Specific target organ toxicity (repeated exposure):	No data available
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):	Dimethyl Sulfoxide Crustacea (Brine Shrimp) 24 h EC_{50} > 6,830 mg/L (NITE GHS classification)
Hazardous to the Aquatic Environment – Long-Term (Chronic):	No data available
Persistence and degradability:	Recalcitrance (METI: Chemical substance safety inspection results) Low bioaccumulation potential (METI: Chemical substance safety inspection results)
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: Dimethyl Sulfoxide
Skin absorption hazardous substance
(Appended Table 2-1035)
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).