

# MATERIAL SAFETY DATA SHEET

Issue Date: 2010/02/04

CODE: CS-02-001(BB01) CS-04-001(BB02)

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**IDENTITY** BAMBANKER( Serum-Free Type Cell Freezing Medium)

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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : BAMBANKER( Serum-Free Type Cell Freezing Medium)

MANUFACTURER :Lymphotec Inc.

SUPPLIER : SUPPLIER(In JAPAN) : NIPPON Genetics Co.Ltd

ADDRESS : Hongo Tsuna Bldg., 17-9, Hongo 6-Chome,  
Bunkyo-ku, Tokyo, 113-0033, Japan

TELEPHONE NUMBER & EMERGENCY TELEPHONE NUMBER:  
+81 (0)3-3813-0961

SUPPLIER(In EUROPE) : Nippon Genetics Europe GmbH

ADDRESS : Binsfelder Strasse 77 , 52351 Dueren Germany

TELEPHONE NUMBER & EMERGENCY TELEPHONE NUMBER :  
+49-2421-2084690

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CONTENT
Dimethyl Sulfoxide ;(1)	10%
BSA	-
SYNONYMS : (1); DMSO; Methyl sulfoxide	
FORMULA : (1); C <sub>2</sub> H <sub>6</sub> OS	
MOLECULAR WEIGHT :(1); 78.14	
CAS NUMBER : (1); 67-68-5	
TSCA INVENTORY : (1); Listed	
EINECS No. : (1); 200-664-3	
IDENTIFICATION OF DANGER ;	
SYMBOL : -----	
R-phrases :36/37/38	

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### 3. HAZARDS IDENTIFICATION

Irritating to eyes, respiratory system and skin.

May be harmful if inhaled and ingested.

It can be absorbed through skin and can cause harmful effects.

(1); NFPA : HR= health-1, flam.-1, react.-0, HMIS : HR= health-1, flam.-1, react.-0

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### 4. FIRST AID MEASURES

GENERAL ADVICE :Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.

INHALATION : Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.

SKIN CONTACT :Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.

EYE CONTACT : Remove any contact lenses at once. Flush eyes well with flooding amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.

INGESTION : Rinse mouth, give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Consult a physician.

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### 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA : Carbon dioxide, dry chemical powder, foam, water

FIRE & EXPLOSION HAZARDS : Toxic, irritating fumes or smoke may be emitted.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS :Firemen should wear normal protective equipment(full bunker gear)and positive-pressure self-contained breathing apparatus.

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## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS :** Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin and eyes.

**ENVIRONMENTAL PRECAUTIONS :** Prevent spills from entering sewers, watercourses or low areas.

**METHODS FOR CLEAN UP :** Do not touch spilled material without suitable protection(See section 8). Take up spilled material with ashes or other absorbents. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

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## 7. HANDLING AND STORAGE

Research use only.

**HANDLING :** Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection away from source of heat or ignition and use non-sparking type tools.

**STORAGE :** Store away from sunlight in a cool( 2-10 °C= 35.6-50 °F ) well-ventilated dry place. Keep container tightly closed.

**INCOMPATIBLE PRODUCTS :** Strong oxidizers, strong reducing agents, strong acids, acid chlorides, phosphorus halids, water reactive materials( alkali metals)

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING MEASURES :** Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.

**VENTILATION :** Local Exhaust ; Necessary, Mechanical(General) ; Recommended

**CONTROL PARAMETER :**

(1); OSHA Final Limits :None established

ACGIH TLV(s) : None established

**PERSONAL PROTECTION ;**

Respiratory protection :NIOSH/MSHA approved respirator

Hand protection : Chemical resistant gloves

Eye protection : Safety glasses(goggles)

Skin protection : Protective clothing

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Liquid  
ODOR : Not available  
pH : Not available  
BOILING POINT : Not available  
MELTING POINT : Not available  
FLASH POINT : Not available  
FLAMMABILITY (solid, gas) : ----  
DECOMPOSITION TEMPERATURE : Not available  
EXPLOSIVE LIMITS : Not available  
VAPOR PRESSURE : Not available  
SPECIFIC GRAVITY : Not available  
SOLUBILITY IN ;  
WATER : Miscible  
ALCOHOL : Miscible  
ACETONE : Miscible  
log Po/w : Not available

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## 10. STABILITY AND REACTIVITY

CONDITION TO AVOID : Sunlight, heat, open flames, high temperature, sparks, static electrical charge, other ignition sources  
INCOMPATIBILITY(MATERIAL TO AVOID) : Strong oxidizers, strong reducing agents, strong acids, acid chlorides, phosphorus halids, water reactive materials( alkali metals)  
HAZARDOUS DECOMPOSITION PRODUCTS : Carbon monoxide, nitrogen oxides, sulfur oxides, methyl mercaptan and formaldehyde may be formed.  
HAZARDOUS POLYMERIZATION : Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY DATA : (1); LD50(orf,rat): 14500mg/kg(TXAPA9 15,74,1969)  
LD50(orf,mouse): 7920mg/kg(CHTPBA 3, 10, 1968)

TDLo(skin,woman): 1800mg/kg(VHTODE 40, 87, 1998)

IRRITATION DATA : (1); Eye; rabbit; 500mg/24H; Mild(85JCAE -,1044,1986)  
Skin; rabbit; 500mg/24H; Mild(85JCAE -,1044,1986)

MUTATION DATA : (1); Mutation in microorganisms; S.typhimurium; 25pph(MUREAV  
303,127,1993)

REPRODUCTIVE EFFECTS DATA :(1); TDLo(orf,mouse): 16mg/kg(5-9 D preg)(TXAPA9 15,152,1969)

TUMORIGENIC DATA : (1); TDLo(orf,rat): 59gm/kg/81W-I; (GTPZAB 28(5),39,1984)

ADDITIONAL INFORMATION ;

NTP : Not listed

IARC : Not listed

OSHA : Not listed

ACGIH :Not listed

(1); EPA GENETOX PROGRAM 1988, Positive: Aspergillus-eneuploidy: S cerevisiae gene  
conversion

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## 12. ECOLOGICAL INFORMATION

BIODEGRADABILITY : (1); This material is not biodegradable.

BIOACCUMULATION POTENTIAL :(1); This material is not or low bioaccumulatable.

AQUATIC TOXICITY : (1); LC50(orange-red killifish): 33000mg/l/48hr

OTHER INFORMATION : (1); WGK; 1

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## 13. DISPOSAL CONSIDERATION

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations ( contact country, local or state environmental agency for specific rules ).

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## 14. TRANSPORT INFORMATION

IATA : Not Restricted.

DOT(Department of Transportation) :Not a Hazardous Material for DOT shipping.

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## 15. REGULATORY INFORMATION

US REGULATIONS ;

(1); CAA/111 Volat. Org. Comp., Canad. WHMIS IDL 1% conc.

EPA : CERCLA RQ= Not listed

EPCRA TPQ= Not listed

OSHA :TQ= Not listed

EU REGULATIONS ;

SYMBOL : -----

R-phrases :36/37/38

Irritating to eyes, respiratory system and skin.

S-phrases :26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

EC index No. :(1); Not listed

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**16. OTHER INFORMATION**

No specific notes

The above information is believed to be correct to be the best of our knowledge and information but does not purport to be all inclusive and shall be used only as a guide. This product is intended to be used by expert persons having chemical knowledge and skill, at their own discretion and risk and NIPPON Genetics Co.Ltd shall not be held liable for any damageresulting from handling or from contact with the above material.