

MATERIAL SAFETY DATA SHEET

Issue Date: 2016/10/27

IDENTITY BAMBANKER™ hRM(Serum-Free Type Cell Freezing Medium)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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

MANUFACTURER : MANUFACTURER : Lymphotec Inc.

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SUPPLIER : SUPPLIER(In JAPAN) : Nippon Genetics Co. Ltd. in Japan.

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2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CONTENT
Dimethyl Sulfoxide ;(1)	10%
SYNONYMS : (1); DMSO; Methyl sulfoxide	
FORMULA : (1); C2H6OS	
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

Human albumin;(2) 1%

CAS NUMBER : (2); 70024-90-7

IDENTIFICATION OF DANGER; No hazardous product according to guideline 1907/2006/EG
For detailed information regarding safety of human albumin, please refer to the attached MSDS from CSL Behring GmbH.

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

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.

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.

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.

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 halides, water reactive materials (alkali metals)

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

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

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 halides, 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.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY DATA : (1); LD50(ori, rat): 14500mg/kg(TXAPA9 15,74,1969)
LD50(ori, 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(ori, mouse): 16mg/kg(5-9 D preg)(TXAPA9 15,152,1969)

TUMORIGENIC DATA : (1); TDLo(ori, 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

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

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).

14. TRANSPORT INFORMATION

IATA : Not Restricted.

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

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

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 Wako shall not be held liable for any damageresulting from handling or from contact with the above material.