

SAFETY DATA SHEET

Version: 1.0

Rat Liver Microsomes

Revision Date: 06/05/2026

SDS No.: USEN20603147

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Rat Liver Microsomes

Product number : LMSD-100P / LMSD-200P / LMSD-300P
LMBW-100P / LMBW-200P / LMBW-300P
LMWS-100P / LMWS-200P / LMWS-300P
LMWH-100P / LMWH-200P / LMWH-300P

Brand : MileCell

1.2 Details of the supplier

Company name and : MILECELL BIOTECHNOLOGY INC.

address : 5965 Village Way E105-160, San Diego, CA 92130

1.3 Emergency telephone number: +858-705-8466

1.4 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: : For R&D use

Uses advised against : Food, drugs, pesticide, or biocidal product use

2. HAZARDS IDENTIFICATION

GHS Classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a hazardous substance or mixture.

GHS label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

Physical and chemical hazards: Not classified based on available information.

Health hazards: Not classified based on available information.

Environmental hazards: Not classified based on available information.

Other hazards which do not result in classification: Contains animal-derived components; Handle with standard biosafety precautions.

3. COMPOSITION/INFORMATION ON INGREDIENT

Substance / Mixture : Mixture

Components : No hazardous ingredients

Component	CAS#	Content %
Sucrose	57-50-1	5.0 – 10.0%
Tris(hydroxymethyl)aminomethane hydrochloride	1185-53-1	1.0 – 2.0 %
Liver Microsomes	NA	1.0 – 5.0 %
Water	7732-18-5	>85 %

4. FIRST AID MEASURES

If inhaled	:	After inhalation: place in fresh air.
In case of skin contact	:	Take off immediately all contaminated clothing. Rinse skin with water.
In case of eye contact	:	Rinse out with plenty of water. Remove contact lenses.
If swallowed	:	Drink water (two glasses at most). Consult doctor if feeling unwell.
Most important symptoms and effects, both acute and delayed	:	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water, Foam, Carbon dioxide (CO ₂), Dry powder
Unsuitable extinguishing media	:	No limitations of extinguishing agents are given.
Hazardous combustion products	:	Nature of decomposition products not known.
Specific extinguishing methods	:	Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Avoid substance contact.
Advice for non-emergency personnel:	:	Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Environmental precautions	:	Do not let product enter drains.
Methods and materials for containment and cleaning up	:	Cover drains. Collect, bind, and pump off spills. Take up carefully with liquid-absorbent materials. Dispose of properly. Clean up affected area.

7. HANDLING AND STORAGE

Handling	:	For precautions see section 2.2.
	:	Smoking, eating and drinking should be prohibited in the ap area.
Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.

Storage: must comply with the technological safety standards.

Storage class : Other liquids and solids

Further information on storage conditions: Recommended storage temperature: - 80 °C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Eye/face protection	:	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH US. Safety glasses with side shields (e.g., NIOSH-approved)
Hand protection	:	Handle with gloves. Gloves must be inspected prior to use. Nitrile gloves.
Hygiene measures	:	Change contaminated clothing. Wash hands after working with substance. Conduct all operations in a certified biosafety cabinet to minimize exposure to potential biohazards.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Khaki Liquid
Odor	:	Odor of raw tissue
pH	:	No data available
Melting point	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Flammability (liquids)	:	No data available
Vapor pressure	:	No data available
Relative density	:	No data available

10. STABILITY AND REACTIVITY

Chemical stability	:	Stable at - 80 °C.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	Protect from light.
Incompatible materials	:	No data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Information on likely routes of exposure: Inhalation, Eye contact, Skin contact

Product:

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified
Skin corrosion/irritation	:	Not classified

Serious eye damage/eye irritation	:	Not classified
Respiratory or skin sensitization	:	No data available
Specific target organ toxicity - single exposure	:	No data available
Specific target organ toxicity-repeated exposure	:	No data available
Aspiration hazard	:	No data available
Germ cell mutagenicity	:	No data available
Reproductive toxicity	:	No data available

Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, OSHA, NTP, ACGIH.

11.2 Additional information:

Based on low component concentrations, no acute toxicity is anticipated under intended R&D use. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. However, when the product is handled appropriately, hazardous effects are unlikely to occur. Handle in accordance with good industrial hygiene and safety practice.

12. ECOLOGICAL INFORMATION

Product

Eco toxicity	:	No data available
Persistence and degradability	:	No data available
Ozone-depletion potential	:	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Additional ecological information	:	No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Waste from residues	:	Dispose of in accordance with all applicable local regulations. Send to a licensed disposal company.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

International regulations:

DOT (Department of Transportation)	:	Not regulated as a dangerous good
IATA-DGR (International Air Transport Association):	:	Not regulated as a dangerous good
IMDG-Code:	:	Not regulated as a dangerous good

National regulations:

49 CFR Road	:	Not regulated as a dangerous good
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Special precautions for user: Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

No chemicals in this material are subject to SARA Title III, Section 302.

SARA 311/312 Hazards: No SARA Hazards

Clean Air Act: No hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act (40 CFR 61). (40 CFR 68.130, Subpart F). (40 CFR 60.489).

Clean Water Act: No Hazardous Substances listed under the U.S. Clean Water Act: Section 311, Table 116.4A. Section 311, Table 117.3. Section 307.

US State Regulations

Massachusetts Right To Know: No components listed

Maine Chemicals of High Concern: No components listed

Vermont Chemicals of High Concern: No components listed

Washington Chemicals of High Concern: No components listed

California Prop 65

This product does not contain any chemicals above de minimis levels known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA: All substances listed as active on the TSCA Inventory

No substances are subjects to a significant New Use Rule.

No substances are subjects to TSCA 12 (b) export notification requirements.

16. OTHER INFORMATION

Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Corporation shall not be held liable for any damage resulting from handling or from contact with the above product.

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