



SAFETY DATA SHEET

1. Identification

Product identifier Human CD1d Tetramer (α -GalCer loaded)-PE

Other means of identification

Product code TS-HCG-1

Recommended use Research use only.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer and Supplier (Asia) Medical & Biological Laboratories (MBL) Co., Ltd.
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E-mail sds-support@mbl.co.jp

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Contact person SDS Support

Supplier MBL International Corporation
15A Constitution Way, Woburn, MA 01801, USA

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2. Hazard(s) identification

Physical hazards

Health hazards

Environmental hazards Aquatic Acute 2
Aquatic Acute 3

Label elements

Hazard symbol None.

Signal word None.

Hazard statement H402 harmful to aquatic life.
H412 harmful to aquatic life with long lasting effects

Precautionary statement

Prevention Avoid release to the environment. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.

Response IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.

Storage Store in a well-ventilated place. Keep cool.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/Information on ingredients

Mixtures

Chemical name	CAS number	%
Pyridine	110-86-1	<1
Sodium Azide	26628-22-8	<0.1

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/ effects, acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing.

Indication of immediate medical attention and special treatment needed Treat symptomatically.

General information Get medical attention if any discomfort continues.

5. Fire-fighting measures

Suitable extinguishing media Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Fire-fighting equipment/ instructions In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards Flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of the SDS.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see Section 13 of the SDS. Wipe up with absorbent material (e.g. cloth, fleece).

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Pyridine (CAS 110-86-1)	PEL	15 mg/m ³ 5 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Pyridine (CAS 110-86-1)	TWA	5 ppm
Sodium azide (CAS 26628-22-8)	Cailling	0.3 mg/m ³ 0.1 ppm

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide adequate ventilation. Explosion-proof general and local exhaust ventilation.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Other	Wear suitable protective clothing.
Respiratory protection	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Colorless.
Odor	Odorless.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Soluble in water.
Partition coefficient (n-octanol/water)	Not available.

Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and
Chemical stability	Stable under normal temperature conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Eye contact	Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Pyridine (CAS 110-86-1)		
Acute		
<i>Oral</i>	LD50 Mouse	1,500 mg/kg
<i>Inhalation</i>	LC50 Rat	4500 ppm, 4hour

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory sensitization	Based on available data, the classification criteria are not met.
Skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Due to lack of data the classification is not possible.
Carcinogenicity	
IARC Monographs. Overall Evaluation of Carcinogenicity	Not listed.
NTP Report on Carcinogens	Not listed.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not listed.
Reproductive toxicity	Due to lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to lack of data the classification is not possible.
Aspiration hazard	Due to lack of data the classification is not possible.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Components	Species	Test Results
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Pyridine (CAS 110-86-1)

Aquatic

Algae	EC50	<i>Pseudokirchneriella subcapitata</i>	0.10mg/L, 72hour
	NOEC	<i>Pseudokirchneriella subcapitata</i>	0.01mg/L, 72hour

Persistence and degradability No data available.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Pyridine (CAS 110-86-1) 0.65

Mobility in soil This product is water soluble and may disperse in soil.

Mobility in general The product is water soluble and may spread in water systems.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in same manner as unused product.

14. Transport information

DOT

UN number	UN1282
UN proper shipping name	Pyridine
Transport hazard class(es)	
Classes	3
Subsidiary risk	-
Label(s)	3
Packing group	II

IATA

UN number	UN1282
UN proper shipping name	Pyridine
Transport hazard class(es)	
Classes	3
Subsidiary risk	-
Packaging group	II

IMDG

UN number	UN1282
UN proper shipping name	Pyridine
Transport hazard class(es)	
Classes	3
Packaging group	II

15. Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)	Not listed.

US state regulations

California Proposition 65 Carcinogen (Pyridine)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
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Europe	EC Inventory	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date	10/18/2018
Revision date	11/26/2020
Version	10.1
List of abbreviations	LC50: Lethal Concentration, 50%. LD50: Lethal Dose, 50%. NOEC: No Observed Effect Concentration.
Further information	Not available.
References	HSDB® - Hazardous Substances Data Bank Registry of Toxic Effects of Chemical Substances (RTECS)
Disclaimer	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.