



## SAFETY DATA SHEET

### 1. Identification

**Product identifier** Human CD1d Tetramer ( $\alpha$ -GalCer loaded)-APC

#### Other means of identification

**Product code** TS-HCG-2

**Recommended use** Research use only.

**Recommended restrictions** None known.

#### Manufacturer / Importer / Supplier / Distributor information

**Manufacturer and Supplier (Asia)** Medical & Biological Laboratories (MBL) Co., Ltd.  
4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, Japan

**Telephone number** +81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST)

**Fax** +81-52-238-1440

**E-mail** sds-support@mbl.co.jp

**URL** <http://www.mbl.co.jp/e/index.html>

**Contact person** SDS Support

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

**Telephone number** +1-800-200-5459, option 3

**Fax** +1-781-939-6963

**E-mail** tech@mblintl.com

**URL** <http://www.mblintl.com/>

**Contact person** Technical Service

### 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 (CO<sub>2</sub>).

**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 <sup>3</sup> 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 <sup>3</sup> 0.1 ppm

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

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

<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.

**10. Stability and reactivity**

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

**11. Toxicological information**

**Information on likely routes of exposure**

<b>Ingestion</b>	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	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)		
<b>Acute</b>		
<i>Oral</i>	LD50 Mouse	1,500 mg/kg
<i>Inhalation</i>	LC50 Rat	4500 ppm, 4hour

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

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

**IATA**

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

**IMDG**

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

**15. Regulatory information**

**US federal regulations**

<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	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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<b>Europe</b>	EC Inventory	Yes
<b>Japan</b>	Inventory of Existing and New Chemical Substances (ENCS)	Yes
<b>United States &amp; Puerto Rico</b>	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).

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## 16. Other information

<b>Issue date</b>	10/18/2018
<b>Revision date</b>	11/26/2020
<b>Version</b>	10.1
<b>List of abbreviations</b>	LC50: Lethal Concentration, 50%. LD50: Lethal Dose, 50%. NOEC: No Observed Effect Concentration.
<b>Further information</b>	Not available.
<b>References</b>	HSDB® - Hazardous Substances Data Bank Registry of Toxic Effects of Chemical Substances (RTECS)
<b>Disclaimer</b>	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.