



SAFETY DATA SHEET

1. Identification

Product identifier I-A⁹⁷ human CLIP₁₀₃₋₁₁₇ Tetramer-PE

Other means of identification

Product code TS-M717-1

Recommended use Research use only.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer and Medical & Biological Laboratories (MBL) Co., Ltd.

Supplier (Asia) 4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, Japan

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E-mail sds-support@mbi.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

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

Contact person Technical Service

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA hazard(s) Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise None.

classified (HNOC)

Supplemental information None.

3. Composition/Information on ingredients

Mixtures

Chemical name	CAS number	%
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. Get medical attention if any discomfort continues.

Skin contact	Remove contaminated clothing. Wash skin with soap and water. Get medical attention if irritation develops or persists.
Eye contact	Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops or persists.
Ingestion	Rinse mouth thoroughly. Get medical attention if any discomfort occurs.
Most important symptoms/ effects, acute and delayed	Dry skin.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Get medical attention if any discomfort develops.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	None known.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.
Fire-fighting equipment/ instructions	Move containers from fire area if you can do it without risk. Use water spray to cool unopened containers. Prevent entry to sewers and public waters.
General fire hazards	The product is non-combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Avoid inhalation of mist and contact with skin and eyes. For personal protection, see Section 8 of the SDS.
Methods and materials for containment and cleaning up	Absorb spillage with suitable absorbent material. After removal, flush contaminated area thoroughly with water. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling	Avoid contact with eyes and prolonged skin contact. Wash hands after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Sodium azide (CAS 26628-22-8)	Ceiling	0.29 mg/m ³ 0.11 ppm

US NIOSH Pocket Guide to Chemical Hazards: Ceiling Limit Value and Time Period (if specified)

Components	Type	Value
Sodium azide (CAS 26628-22-8)	Ceiling	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. Provide easy access to water supply and eye wash facilities.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Risk of splashes: Wear safety glasses with side shields.
Skin protection	

Hand protection	Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Respiratory protection	No special precautions. 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	Colored, dependent on the conjugates. (Alexa Fluor® 488; yellowish green, Alexa Fluor® 594; purple, Alexa Fluor® 647; pale blue, APC; light blue, Azami-Green; pale green, FITC; yellowish green, PE; pink)
Odor	Odorless.
Odor threshold	Not available.
pH	Neutral.
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	Not available.
- lower (%)	
Flammability limit	Not available.
- upper (%)	
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.

10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of use, storage and
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Sodium azide: Reacts with copper, lead, silver, mercury and carbon disulfide to form particularly shock-sensitive compounds. Reacts with acids, forming toxic and explosive hydrogen azide.
Conditions to avoid	None known.
Incompatible materials	Heavy metals. Acids.
Hazardous decomposition products	None known.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Large quantities: May cause discomfort if swallowed.
Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Prolonged contact may cause dryness of the skin.
Eye contact	Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Dry skin.

Information on toxicological effects**Acute toxicity** Large quantities: May cause discomfort if swallowed.**Skin corrosion/irritation** May cause mild skin irritation.**Serious eye damage/eye irritation** May cause 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** No data available.**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** No data available.**Specific target organ toxicity** No data available.**- single exposure****Specific target organ toxicity** No data available.**- repeated exposure****Aspiration hazard** Based on available data, the classification criteria are not met.**Chronic effects** Prolonged inhalation may be harmful.

12. Ecological information**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment.**Persistence and degradability** No data available.**Bioaccumulative potential** No data available.**Mobility in soil** No data available.**Mobility in general** The product is water soluble and may spread in water systems.**Other adverse effects** The environmental hazard of the product is considered to be limited.

13. Disposal considerations**Disposal instructions** Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground.**Local disposal regulations** Dispose of in accordance with local regulations.**Hazardous waste code** Not regulated.**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** Not regulated as dangerous goods.**IATA** Not regulated as dangerous goods.**IMDG** Not regulated as dangerous goods.**Transport in bulk according** Not applicable.**to Annex II of MARPOL 73/78 and the IBC Code**

15. Regulatory information**US federal regulations** This product is not hazardous according to OSHA 29CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)** Not regulated.**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)** Not listed.**CERCLA Hazardous Substance List (40 CFR 302.4)** Not listed.**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

Hazard categories

Immediate Hazard - No
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance

No

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

Food and Drug Administration (FDA)

Not regulated.

US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Massachusetts RTK - Substance List

Not listed.

New Jersey Worker and Community Right-to-Know Act

Not listed.

Pennsylvania RTK - Hazardous Substances

Not listed.

Rhode Island RTK

Not listed.

California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT)

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	EC Inventory	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	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 03/27/2018

Revision date —

Version 10

Further information Not available.

References Registry of Toxic Effects of Chemical Substances (RTECS)
 HSDB® - Hazardous Substances Data Bank

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.