

SAFETY DATA SHEET

1. Identification

Product identifier

HLA-A^{*}11:01 Control Tetramer-ATAAAAAAK-PE

| Other means of identification | |
|-------------------------------|--|
| Product code | TS-M152-1 |
| Recommended use | Research use only. |
| Recommended restrictions | None known. |
| Manufacturer / Importer / Sup | plier / Distributor information |
| Manufacturer and | Medical & Biological Laboratories (MBL) Co., Ltd. |
| Supplier (Asia) | 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 | 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 weigl are in percent by volume. | nt unless ingredient is a gas. Gas concentrations |

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 Unsuitable extinguishing media | Use fire-extinguishing media appropriate for surrounding materials. 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, | Avoid inhalation of mist and contact with skin and eyes. For personal protection, see Section | |

| Personal precautions, | Avoid inhalation of mist and contact with skin and eyes. For personal protection, see Section |
|-----------------------------|---|
| protective equipment and | 8 of the SDS. |
| emergency procedures | |
| Methods and materials for | Absorb spillage with suitable absorbent material. After removal, flush contaminated area |
| containment and cleaning up | 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 handlingAvoid contact with eyes and prolonged skin contact. Wash hands after handling. Observe
good industrial hygiene practices.Conditions for safe storage,
including anyKeep container tightly closed. Store away from incompatible materials.

incompatibilities

8. Exposure controls/personal protection

Occupational exposure limits

| Components | Туре | Value | |
|-------------------------------|---------|------------|--|
| Sodium azide (CAS 26628-22-8) | Ceiling | 0.29 mg/m3 | |
| | | 0.11 ppm | |

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

| Components | Туре | Value | |
|-------------------------------|---------|-----------|--|
| Sodium azide (CAS 26628-22-8) | Ceiling | 0.3 mg/m3 | |
| | | 0.1 ppm | |

Provide adequate ventilation. Provide easy access to water supply and eye wash facilities.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

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. |
| рН | Neutral. |
| Melting point/freezing point | Not available. |
| Initial boiling point and | Not available. |
| boiling range | |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or e | 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 | Not available. |
| (<i>n</i> -octanol/water) | |
| 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 | Dry skin. | | |
|---|--|---|--|
| physical, chemical and | | | |
| toxicological characteristics | | | |
| Information on toxicological e | ffects | | |
| Acute toxicity | Large quantities: May cause discomfort if sy | wallowed. | |
| Skin corrosion/irritation | May cause mild skin irritation. | | |
| Serious eye damage/eye | May cause eye irritation. | | |
| 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. Overa | II Evaluation of Carcinogenicity | Not listed. | |
| NTP Report on Carcinoge | ens | Not listed. | |
| OSHA Specifically Regula | ated 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 | | | |
| | Based on available data, the classification criteria are not met. | | |
| Aspiration hazard | Based on available data, the classification of | criteria are not met. | |
| Aspiration hazard Chronic effects | Based on available data, the classification of Prolonged inhalation may be harmful. | criteria are not met. | |
| Chronic effects | Prolonged inhalation may be harmful. | criteria are not met. | |
| Chronic effects 12. Ecological information | Prolonged inhalation may be harmful. | | |
| Chronic effects | Prolonged inhalation may be harmful. | tally hazardous. However, this does not exclude | |
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| Chronic effects 12. Ecological information Ecotoxicity | Prolonged inhalation may be harmful. | tally hazardous. However, this does not exclude | |
| Chronic effects 12. Ecological information Ecotoxicity Persistence and degradability | Prolonged inhalation may be harmful. | tally hazardous. However, this does not exclude | |
| Chronic effects 12. Ecological information Ecotoxicity Persistence and degradability Bioaccumulative potential | Prolonged inhalation may be harmful. on The product is not classified as environment the possibility that large or frequent spills has environment. No data available. | tally hazardous. However, this does not exclude | |
| Chronic effects 12. Ecological information Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil | Prolonged inhalation may be harmful. on The product is not classified as environment the possibility that large or frequent spills has environment. No data available. No data available. No data available. | tally hazardous. However, this does not exclude ave a harmful or damaging effect on the | |
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| Chronic effects 12. Ecological information Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects | Prolonged inhalation may be harmful. on The product is not classified as environment the possibility that large or frequent spills has environment. No data available. No data available. No data available. The product is water soluble and may spread The environmental hazard of the product is | tally hazardous. However, this does not exclude ave a harmful or damaging effect on the ad in water systems. | |
| Chronic effects 12. Ecological information Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects 13. Disposal considerati | Prolonged inhalation may be harmful. ON The product is not classified as environment the possibility that large or frequent spills has environment. No data available. No data available. No data available. The product is water soluble and may spread The environmental hazard of the product is ONS | tally hazardous. However, this does not exclude ave a harmful or damaging effect on the ad in water systems. considered to be limited. | |
| Chronic effects 12. Ecological information Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects | Prolonged inhalation may be harmful. on The product is not classified as environment the possibility that large or frequent spills has environment. No data available. No data available. No data available. The product is water soluble and may spread The environmental hazard of the product is ons Dispose of in accordance with all applicable | tally hazardous. However, this does not exclude ave a harmful or damaging effect on the ad in water systems. | |
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| Chronic effects 12. Ecological information Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects 13. Disposal consideration Disposal instructions Local disposal regulations Hazardous waste code Waste from residues / unused | Prolonged inhalation may be harmful. The product is not classified as environment the possibility that large or frequent spills has environment. No data available. No data available. No data available. The product is water soluble and may spread The environmental hazard of the product is ons Dispose of in accordance with all applicable courses or onto the ground. Dispose of in accordance with local regulati | tally hazardous. However, this does not exclude ave a harmful or damaging effect on the ad in water systems. considered to be limited. | |
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14. Transport information

| DOT | Not regulated as dangerous goods. |
|-----------------------------|-----------------------------------|
| ΙΑΤΑ | 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 re

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 haz | ardous 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 Administ | ration (FDA) | Not regulated. |
| US state regulations | This product does not contain a chemical known to the State o birth defects or other reproductive harm. | f California to cause cancer, |
| Massachusetts RTK - Su | - | 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 (F | PICCS) Yes |
| United States & Puerto | Toxic Substances Control Act (TSCA) Inventory | Yes |
| Rico | duct complies with the inventory requirements administered by th | a according country(a) |

*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 | 09/29/2017 |
|---------------------|---|
| 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. |