SAFETY DATA SHEET

1. Identification

Product identifier
Anti-CD93 (Human) mAb-PE

Other means of identification

Product code
D198-5

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
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 classified (HNOC)
None.

Supplemental information
None.

3. Composition/Information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>26628-22-8</td>
<td>&lt; 0.1</td>
</tr>
</tbody>
</table>

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.

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### 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.

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### 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.

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### 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.

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### 8. Exposure controls/personal protection

**Occupational exposure limits**

#### US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide (CAS 26628-22-8)</td>
<td>Ceiling</td>
<td>0.29 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.11 ppm</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide (CAS 26628-22-8)</td>
<td>Ceiling</td>
<td>0.3 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1 ppm</td>
</tr>
</tbody>
</table>

**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**
  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.

- **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.
### 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**  
  - lower (%): Not available.  
  - 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.

### 10. Stability and reactivity

#### Reactivity
- The product is stable and non-reactive under normal conditions of use, storage and handling.

#### 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

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
- single exposure
No data available.

Specific target organ toxicity
- repeated exposure
No data available.

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 to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

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

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 09/28/2011
Revision date 09/30/2016
Version 10
Further information Not available.
References Registry of Toxic Effects of Chemical Substances (RTECS)
HSDB® - Hazardous Substances Data Bank
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