# SAFETY DATA SHEET

## 1. Identification

**Product identifier**  
Anti-Pax6 pAb

**Other means of identification**

- **Product code**  
  PD022
- **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 thoroughly 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)**

## 3. Composition/Information on ingredients

### Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol (Glycerin)</td>
<td>56-81-5</td>
<td>50 - 60</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 discomfort develops or persists.

### Skin contact

Remove contaminated clothing. Wash with soap and water. Get medical attention if irritation develops or persists. Wash contaminated clothing before reuse.
Eye contact
Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation develops or persists.

Ingestion
Drink plenty of water. Seek medical advice.

Most important symptoms/effects, acute and delayed
Irritation of eyes and mucous membranes. Mild skin irritation.

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
None known.

Specific hazards arising from the chemical
Fire or high temperatures create: Carbon oxides.

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 that without risk. Use water spray to cool unopened containers. Prevent entry to sewers and public waters.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation. 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
Dike far ahead of liquid spill for later disposal. Small Spills: Absorb spillage with suitable absorbent material. Clean contaminated surface thoroughly. After removal, flush contaminated area thoroughly with water. Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Environmental precautions
Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling
Provide adequate ventilation. Use work methods which minimize production of vapors and mists. Avoid inhalation of mist and contact with skin and eyes. 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. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol (CAS 56-81-5)</td>
<td>PEL</td>
<td>5 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m3</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol (CAS 56-81-5)</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>Mist.</td>
</tr>
</tbody>
</table>

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

Exposure guidelines
No exposure standards allocated.

Appropriate engineering controls
Provide adequate ventilation and minimize the risk of inhalation of vapors and mists.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses.
Hand protection
Wear protective gloves. Nitrile gloves are recommended, but 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. Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Respiratory protection
In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment with combination filter (gas filter/dust filter). 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: Viscous liquid.
- Color: Colorless.
- 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.
  - Flammability 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.

10. Stability and reactivity

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

Chemical stability
Stable at normal conditions.

Possibility of hazardous reactions
Hazardous reactions do not occur.

Conditions to avoid
Strong heating. Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
None known.

11. Toxicological information

Information on likely routes of exposure
- Ingestion
  Ingestion may cause irritation and malaise.
- Inhalation
  Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact
Eye contact
Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity
Skin corrosion/irritation
Serious eye damage/eye irritation
Respiratory sensitization
Skin sensitization
Germ cell mutagenicity
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity
- single exposure
Specific target organ toxicity
- repeated exposure
Aspiration hazard

12. Ecological information

Ecotoxicity
Persistence and degradability
Bioaccumulative potential
Partition coefficient n-octanol / water (log Kow)
Glycerol (CAS 56-81-5) -1.76

Mobility in soil
Mobility in general
Other adverse effects

13. Disposal considerations

Disposal instructions
Local disposal regulations
Hazardous waste code
Waste from residues / unused products
Contaminated packaging

14. Transport information

DOT
IATA
IMDG
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
CERCLA Hazardous Substance List (40 CFR 302.4)

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories

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

SARA 302 Extremely hazardous substance
Yes

SARA 311/312 Hazardous chemical

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.

Drug Enforcement Administration (DEA), List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number
Not listed.

Drug Enforcement Administration (DEA), List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))
Not regulated.

DEA Exempt Chemical Mixtures Code Number
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
Glycerol (CAS 56-81-5)
Not regulated.

New Jersey Worker and Community Right-to-Know Act
Glycerol (CAS 56-81-5)
Not regulated.

Pennsylvania RTK - Hazardous Substances
Glycerol (CAS 56-81-5)
Not listed.

Rhode Island RTK
Glycerol (CAS 56-81-5)
Not listed.

California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT)

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
IUCLID

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.