SAFETY DATA SHEET

1. Identification

Product identifier: CycLex® Proteasome Enrichment Activity Assay Kit
Proteasome Substrate (Suc-LLVY-AMC)

Other means of identification
- Product code: CY-7002
- 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: Flammable liquids Category 4
Health hazards: Not classified.
OSHA hazard(s): Not classified.

Label elements
- Hazard symbol: None.
- Signal word: Warning
- Hazard statement: Combustible liquid.

Precautionary statement
- Prevention: Keep away from flames and hot surfaces. - No smoking. Wear protective gloves/eye protection/face protection.
- Response: In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.
- Storage: Store in a well-ventilated place. Keep cool.
- Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/Instruction on ingredients

Mixtures
- Chemical name: Dimethyl sulfoxide (DMSO)
- CAS number: 67-68-5
- %: 90 - 100

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 with soap and water. Get medical attention if irritation develops or persists. Wash contaminated clothing before reuse. 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 eye(s) with plenty of water. Remove any contact lenses and open eyelids wide apart. Get medical attention if irritation develops or persists.

Ingestion: Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and delayed: Mild eye irritation. May cause 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


Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: Vapors may form explosive mixtures with air. By heating and fire, harmful vapors/gases may be formed.

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 pubic waters.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ensure adequate ventilation. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. 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 non-combustible, 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. Do not smoke, use open fire or other sources of ignition. Wash hands after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Keep away from sources of ignition - No smoking. Keep container tightly closed. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl sulfoxide (DMSO) (CAS 67-68-5)</td>
<td>TWA</td>
<td>250 ppm</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. Use explosion-proof equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection: If risk of splashing, wear safety goggles or face shield.

Skin protection: If risk of splashing, wear safety goggles or face shield.
Hand protection

Wear protective gloves. Butyl rubber 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 apron or protective clothing in case of splashes.

Respiratory protection

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. 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
Yellow.

Odor
Garlic-like odor.

Odor threshold
Not available.

pH
Not available.

Melting point/freezing point
Not available.

Initial boiling point and boiling range
372.2 °F (189 °C) DMSO

Flash point
188.6 °F (87.0 °C) DMSO

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
(\textit{n}-octanol/water)
Not available.

Auto-ignition temperature
Not available.

Decomposition temperature
Not available.

Viscosity
Not available.

Explosive properties
Not explosive.

Oxidizing properties
Not oxidizing.

10. Stability and reactivity

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

Chemical stability
Stable under normal temperature conditions.

Possibility of hazardous reactions
None known.

Conditions to avoid
Heat, flames and sparks. Moisture.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
Sulfur oxides. Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Ingestion
Large quantities: May be absorbed in the body and cause dizziness, nausea and vomiting.

Inhalation
Components of the product may be absorbed into the body by inhalation.

Skin contact
May be absorbed through the skin. DMSO (dimethyl sulfoxide) easily penetrates the skin and may enhance the rate of skin absorption of skin-permeable substances.
Eye contact
Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics
Mild eye irritation. May cause mild skin irritation.

Information on toxicological effects

Acute toxicity
Large quantities: May cause discomfort if swallowed. May be absorbed in the body and cause dizziness, nausea and vomiting.

Components | Species | Test Results
--- | --- | ---
Dimethyl sulfoxide (DMSO) (CAS 67-68-5)  
**Acute**  
Oral  
LD50  
Mouse | 7,920 mg/kg
Rat | 17.9 ml/kg

Skin corrosion/irritation
May cause mild skin irritation. DMSO (dimethyl sulfoxide) easily penetrates the skin and may enhance the rate of skin absorption of skin-permeable substances.

Serious eye damage/eye irritation
Direct contact with eyes may cause temporary irritation.

Respiratory sensitization
No data available.

Skin sensitization
No data available.

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
No data available.

12. Ecological information

Ecotoxicity
The product components are 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.

Components | Species | Test Results
--- | --- | ---
Dimethyl sulfoxide (DMSO) (CAS 67-68-5)  
**Aquatic**  
Fish  
LC50  
Rainbow trout, donaldson trout 
(*Oncorhynchus mykiss*) | 33,000 - 37,000 mg/L, 96 hours

Persistence and degradability
No data available.

Bioaccumulative potential

Partition coefficient *n*-octanol / water (log *K*<sub>ow</sub>)
Dimethyl sulfoxide (DMSO) (CAS 67-68-5) | -2.03

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
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

<table>
<thead>
<tr>
<th>Category</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>NA1993</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Liquid</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>Liquid</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>Yes</td>
</tr>
<tr>
<td>Label(s)</td>
<td>Yes</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling. This material is not regulated under 49 CFR if in a container of 119 gallon capacity or less.</td>
</tr>
<tr>
<td>Special provisions</td>
<td>IB3, T1, T4, TP1</td>
</tr>
<tr>
<td>Packaging exceptions</td>
<td>150</td>
</tr>
<tr>
<td>Packaging non bulk</td>
<td>203</td>
</tr>
<tr>
<td>Packaging bulk</td>
<td>241</td>
</tr>
</tbody>
</table>

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

- TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated.
- 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 Not listed.
- SARA 311/312 Hazardous chemical Yes
- 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.

US state regulations

- Massachusetts RTK - Substance List Not regulated.
- New Jersey Worker and Community Right-to-Know Act Dimethyl sulfoxide (DMSO) (CAS 67-68-5)
- Pennsylvania Worker and Community Right-to-Know Law Not regulated.
- Rhode Island RTK Not regulated.
- California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT) Not listed.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDLS)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>EC Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Korea  
New Zealand  
Philippines  
United States & Puerto Rico  

*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**  
01/30/2016

**Revision date**  
09/30/2016

**Version**  
10

**List of abbreviations**  
LC50: Lethal Concentration, 50%.  
LD50: Lethal Dose, 50%.

**Further information**  
Not available.

**References**  
International Chemical Safety Cards (ICSC)  
GESTIS Substance Database  
ECHA CHEM

**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.
SAFETY DATA SHEET

1. Identification

Product identifier: CycLex® Proteasome Enrichment Activity Assay Kit
UbL-Resin, Control-Resin

Other means of identification
Product code: CY-7002
Recommended use: Research use only.
Recommended restrictions: None known.

Manufacturer / Importer / Supplier / Distributor information
Manufacturer and Supplier: 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.

### 5. Fire-fighting measures

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>Use fire-extinguishing media appropriate for surrounding materials.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitable extinguishing media</td>
<td>None known.</td>
</tr>
</tbody>
</table>

### 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

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

### 7. Handling and storage

<table>
<thead>
<tr>
<th>Precautions for safe handling</th>
<th>Avoid contact with eyes and prolonged skin contact. Wash hands after handling. Observe good industrial hygiene practices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditions for safe storage, including any incompatibilities</td>
<td>Keep container tightly closed. Store away from incompatible materials.</td>
</tr>
</tbody>
</table>

### 8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Occupational exposure limits</th>
</tr>
</thead>
</table>

#### 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>

<table>
<thead>
<tr>
<th>Biological limit values</th>
<th>No biological exposure limits noted for the ingredient(s).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate engineering controls</td>
<td>Provide adequate ventilation. Provide easy access to water supply and eye wash facilities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual protection measures, such as personal protective equipment</th>
</tr>
</thead>
</table>

#### 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
Other
Respiratory protection
Wear appropriate clothing to prevent repeated or prolonged skin contact.
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
Colorless.
Odor
Odorless.
Odor threshold
Not available.
pH
Neutral.
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.
- Flammability limit
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 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
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.

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.


CERCLA Hazardous Substance List (40 CFR 302.4) Not listed.
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
01/30/2016
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
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.
### SAFETY DATA SHEET

#### 1. Identification

**Product identifier**
- CycLex® Proteasome Enrichment Activity Assay Kit
- 10X Assay Buffer

**Other means of identification**
- **Product code**: CY-7002
- **Recommended use**: Research use only.
- **Recommended restrictions**: None known.

**Manufacturer / Importer / Supplier / Distributor information**

**Manufacturer**
- 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
  - **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.

**Environmental hazards**
- **Label elements**
  - **Hazard symbol**: None.
  - **Signal word**: None.
  - **Hazard statement**: Harmful to aquatic life.
  - **Precautionary statement**
    - **Prevention**: Avoid release to the environment. Observe good industrial hygiene practices.
    - **Response**: Wash hands after handling.
    - **Storage**: None.
    - **Disposal**: Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)**
- 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>Nonidet P-40</td>
<td>9016-45-9</td>
<td>0.5</td>
</tr>
<tr>
<td>Sodium dodecyl sulphate</td>
<td>151-21-3</td>
<td>0.01</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

- Avoid release to the environment. Observe good industrial hygiene practices.
- Wash hands after handling.
- Dispose of contents/container in accordance with local/regional/national/international regulations.
### Inhalation
Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

### Skin contact
Remove contaminated clothing. Dry skin with paper towel or similar. 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
Drink plenty of water. Get medical attention if any discomfort occurs. Dry skin.

### Most important symptoms/effects, acute and delayed
- Dry skin.

### Indication of immediate medical attention and special treatment needed
Treat symptomatically.

### Ingestion
- Drink plenty of water. Get medical attention if any discomfort occurs.

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

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures
Avoid contact with eyes and prolonged skin contact. 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.

### 8. Exposure controls/personal protection

#### Occupational exposure limits
No exposure limits noted for ingredient(s).

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

#### Appropriate engineering controls
Ventilation is not normally required.

#### Individual protection measures, such as personal protective equipment

<table>
<thead>
<tr>
<th>Protection Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye/face protection</td>
<td>Risk of splashes: Wear safety glasses with side shields.</td>
</tr>
<tr>
<td>Skin protection</td>
<td>Risk of contact: Wear protective gloves. Suitable gloves can be recommended by the glove supplier.</td>
</tr>
<tr>
<td>Hand protection</td>
<td>Wear appropriate thermal protective clothing, when necessary.</td>
</tr>
<tr>
<td>Other</td>
<td>Wear appropriate clothing to prevent repeated or prolonged skin contact.</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>No special precautions. Seek advice from local supervisor.</td>
</tr>
<tr>
<td>Thermal hazards</td>
<td></td>
</tr>
</tbody>
</table>

#### 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: 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: 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.

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: None known.
Incompatible materials: None known.
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: No data available.
Skin sensitization: No data available.
Germ cell mutagenicity: No data available.
Carcinogenicity: No data available.
12. Ecological information

Ecotoxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonidet P-40 (CAS 9016-45-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Fish</td>
<td>LC50</td>
<td>Japanese killifish</td>
</tr>
<tr>
<td></td>
<td>LC50</td>
<td>Goldfish</td>
</tr>
<tr>
<td></td>
<td>LC50</td>
<td>Bluegill</td>
</tr>
<tr>
<td></td>
<td>LC50</td>
<td>Rainbow trout</td>
</tr>
<tr>
<td>Sodium dodecyl sulphate (CAS 151-21-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Crustacea</td>
<td>EC50</td>
<td>Acartia tonsa</td>
</tr>
<tr>
<td></td>
<td>LC50</td>
<td>Water flea (Daphnia magna)</td>
</tr>
<tr>
<td>Aquatic Fish</td>
<td>LC50</td>
<td>Carp, hawk fish (Cirrhinus mrigala)</td>
</tr>
</tbody>
</table>

Persistence and degradability

- No data available.

Bioaccumulative potential

- No data available.

Mobility in soil

- Expected to be highly mobile in soil.

Mobility in general

- The product is water soluble and may spread in water systems.

Other adverse effects

- Not available.

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

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No
SARA 302 Extremely hazardous substance
SARA 311/312 Hazardous chemical
SARA 313 (TRI reporting)

Other federal regulations
- Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
- Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
- Safe Drinking Water Act (SDWA)
- Food and Drug Administration (FDA)

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
New Jersey Worker and Community Right-to-Know Act
Pennsylvania RTK - Hazardous Substances
Rhode Island RTK
California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT)

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>EC Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*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: 01/30/2016
Revision date: 09/30/2016
Version: 10
List of abbreviations: LC50: Lethal Concentration, 50%.
Further information: Not available.
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.
SAFETY DATA SHEET

1. Identification
Product identifier CycLex® Proteasome Enrichment Activity Assay Kit
10X Cell Extraction Buffer
Other means of identification
Product code CY-7002
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.
Environmental hazards Hazardous to the aquatic environment, long-term hazard Category 3
Label elements
Hazard symbol None.
Signal word None.
Hazard statement Harmful to aquatic life with long lasting effects.
Precautionary statement
Prevention Observe good industrial hygiene practices. Avoid release to the environment.
Response Wash hands after handling.
Storage Store away from incompatible materials.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC) 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>Triton X-100</td>
<td>9002-93-1</td>
<td>10</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 Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact
Remove contaminated clothing. Dry skin with paper towel or similar. 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
Drink plenty of water. Get medical attention if any discomfort occurs.

Most important symptoms/effects, acute and delayed
Irritation of eyes and mucous membranes, including burning and tearing.

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
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 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
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
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
No exposure limits noted for ingredient(s).

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.

Skin protection

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.

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: 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: Not available.

Solubility(ies): Soluble in water.

Partition coefficient: Not available.

Auto-ignition temperature: 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 polymerization does not occur. Hazardous reactions do not occur.

Conditions to avoid: Strong heating. Contact with incompatible materials.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Carbon oxides.

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: 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: Irritation of eyes and mucous membranes, including burning and tearing.

Information on toxicological effects

Acute toxicity: Ingestion may cause irritation and malaise.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triton X-100 (CAS 9002-93-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Oral LD50 Rat 1,800 mg/kg

Skin corrosion/irritation May cause skin irritation.
Serious eye damage/eye irritation Causes serious eye damage.
Respiratory sensitization No data available.
Skin sensitization No data available.
Germ cell mutagenicity No data available.
Carcinogenicity
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 No data available.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triton X-100</td>
<td>Water flea (Daphnia magna)</td>
<td>7.5 - 9.8 mg/L, 48 hours</td>
</tr>
<tr>
<td>Aquatic Crustacea</td>
<td>Bluegill (Lepomis macrochirus)</td>
<td>2.8 - 3.2 mg/L, 96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability No data available.
Bioaccumulative potential No data available.
Mobility in soil Expected to be highly mobile in soil.
Mobility in general The product is water soluble and may spread in water systems.
Other adverse effects None known.

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 hazardous according to OSHA 29 CFR 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.
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.

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 regulated.
New Jersey Worker and Community Right-to-Know Act
Not regulated.
Pennsylvania RTK - Hazardous Substances
Not regulated.
Rhode Island RTK
Not regulated.
California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT)
Not listed.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>EC Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*“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
01/30/2016
Revision date
09/30/2016
Version
10
List of abbreviations
LC50: Lethal Concentration, 50%.
LD50: Lethal Dose, 50%.
Further information
Not available.
References
RTECS
AQUIRE
C&L Inventory database
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.