Predicta™ Flow Dual Cure Bulk-fill Composite

Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 09 November 2018   Revision date: 09 November 2018   Version: 1.0

SECTION 1: Identification

1.1. Identification
Product form : Mixture
Trade name Identifiers:
Identifiers:
Predicta™ Flow Dual Cure Bulk-fill Composite – Catalyst Component
S600 Predicta™ Bioactive Core Dual-Cure Core White Flowable
S601 Predicta™ Bioactive Core Dual-Cure Core Build-up Tooth Flowable
S605 Predicta™ Bioactive Core Dual-Cure Core Build-up White Stackable
S606 Predicta™ Bioactive Core Dual-Cure Core Build-up Tooth Stackable
S610 Predicta™ Bioactive Bulk Dual-Cure Restorative A1/B1 Flowable
S611 Predicta™ Bioactive Bulk Dual-Cure Restorative A2/B2 Flowable
S615 Predicta™ Bioactive Bulk Dual-Cure Restorative A1/B1 Sculptable
S616 Predicta™ Bioactive Bulk Dual-Cure Restorative A2/B2 Sculptable
S620 5ml Dispensing Gun
S621 17-gauge Dispensing Tips (30pcs)
S622 19-gauge Dispensing Tips (30pcs)

1.2. Recommended use and restrictions on use
Use of the substance/mixture : Dual-Cure Resin Composite Restorative

1.3. Supplier
Parkell Inc.
300 Executive Drive
Edgewood, NY 11717
T (631) 249-1134

1.4. Emergency telephone number
Emergency number : INFOTRAC 1-352-323-3500 (International)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS-US classification
Skin corrosion/irritation Category 2 : Causes skin irritation
Serious eye damage/eye irritation Category 2A : Causes serious eye irritation
Skin sensitization, Category 1 : May cause an allergic skin reaction
Specific target organ toxicity (single exposure) Category 3 : May cause respiratory irritation

09 November 2018 EN (English US)  Page 1
2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US) : 

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation
May cause respiratory irritation

Precautionary statements (GHS-US) : Avoid breathing mist, vapors.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace
Wear protective gloves.
If on skin: Wash with plenty of water
If inhaled: Remove person to fresh air and keep comfortable for breathing
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Call a doctor, a POISON CENTER if you feel unwell
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Remove contaminated clothing and wash it before reuse.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : Additional hazards when processed. Dust explosion possible if in powder or granular form, mixed with air.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(oxy-1,2-ethanediyl).α,α,α'-[(1-methylethylidene)-di-4,1-phenylene]bis[omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-</td>
<td>(CAS-No.) 41637-38-1</td>
<td>10 - 20</td>
<td>Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335</td>
</tr>
<tr>
<td>2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester</td>
<td>(CAS-No.) 6606-59-3</td>
<td>4.2 - 11</td>
<td>Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335</td>
</tr>
<tr>
<td>2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester</td>
<td>(CAS-No.) 1565-94-2</td>
<td>0.8 - 4</td>
<td>Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317</td>
</tr>
<tr>
<td>Dibenzoyl peroxide</td>
<td>(CAS-No.) 94-36-0</td>
<td>0.0097 - 0.97</td>
<td>Org. Perox. B, H241; Eye Irrit. 2A, H319; Skin Sens. 1, H317</td>
</tr>
</tbody>
</table>
### Section 4: First-aid measures

#### 4.1. Description of first aid measures

<table>
<thead>
<tr>
<th>Description of first aid measures</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-aid measures after inhalation</td>
<td>Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.</td>
</tr>
<tr>
<td>First-aid measures after skin contact</td>
<td>Immediately rinse with plenty of water (for at least 15 minutes). Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. If skin irritation or rash occurs: Get medical advice/attention.</td>
</tr>
<tr>
<td>First-aid measures after eye contact</td>
<td>Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.</td>
</tr>
<tr>
<td>First-aid measures after ingestion</td>
<td>Rinse mouth. If swallowed: rinse mouth. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.</td>
</tr>
</tbody>
</table>

#### 4.2. Most important symptoms and effects (acute and delayed)

| Symptoms/effects after inhalation | May cause respiratory irritation. May cause an allergic skin reaction. |
| Symptoms/effects after skin contact | Causes skin irritation. May cause an allergic skin reaction. |
| Symptoms/effects after eye contact | Causes eye irritation. |
| Symptoms/effects after ingestion | May cause gastric irritation. |

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.
SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: None known.

5.2. Specific hazards arising from the chemical

Fire hazard: None under normal use. On combustion, forms: carbon oxides (CO and CO2).

Explosion hazard: No direct explosion hazard.

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

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Additional hazards when processed. Avoid creating or spreading dust.

6.1.1. For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: On land, sweep or shovel into suitable containers. Store away from other materials. Additional hazards when processed. Minimize generation of dust.

6.4. Reference to other sections

For further information refer to section 8: “Exposure controls/personal protection”. For disposal of residues refer to section 13: “Disposal considerations.”
SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed: Avoid creating or spreading dust. Dust may form flammable and explosive mixture with air.
Precautions for safe handling: Provide good ventilation in process area to prevent formation of vapor. Avoid breathing mist, vapors,
Hygiene measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep only in the original container in a cool, well ventilated place away from: Incompatible materials. Keep container tightly closed. Keep away from heat.
Incompatible materials: Strong oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Local name</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]- (41637-38-1)</td>
<td>Benzoyl peroxide</td>
<td>ACGIH TWA (mg/m³)</td>
<td>5 mg/m³</td>
<td>OSHA REL (TWA) (mg/m³)</td>
</tr>
<tr>
<td>Dibenzoyl peroxide (94-36-0)</td>
<td>Not applicable</td>
<td>ACGIH</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>

2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)

Not applicable

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (1565-94-2)

Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls: Either local exhaust or general room ventilation is usually required. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Impermeable protective gloves
Eye protection:
Chemical goggles or safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
Wear appropriate mask. Where excessive vapor, mist, or dust may result, use approved respiratory protection equipment

Other information:
Do not eat, drink or smoke during use.
### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>gel. Paste.</td>
</tr>
<tr>
<td>Color</td>
<td>natural color</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

No additional information available
SECTION 10: Stability and reactivity

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

10.2. Chemical stability
Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions
May polymerize on exposure to temperature rise.

10.4. Conditions to avoid
Additional hazards when processed. Avoid dust formation.

10.5. Incompatible materials
Strong oxidizing agents.

10.6. Hazardous decomposition products
No hazardous decomposition products known at room temperature. On combustion, forms: carbon oxides (CO and CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity (oral): Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal): Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation): Not classified (Based on available data, the classification criteria are not met)

**Dibenzoyl peroxide (94-36-0)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>7710 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/irritation: Causes serious eye irritation.
Respiratory or skin sensitization: May cause an allergic skin reaction.
Germ cell mutagenicity: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity: Not classified (Based on available data, the classification criteria are not met)

**Dibenzoyl peroxide (94-36-0)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>3 - Not classifiable</td>
</tr>
</tbody>
</table>

Reproductive toxicity: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity – single exposure: May cause respiratory irritation.

**Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[omega.-[(2-methyl-1-oxo-2-propenyl)oxy]- (41637-38-1)**

Specific target organ toxicity – single exposure: May cause respiratory irritation.

**2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)**

Specific target organ toxicity – single exposure: May cause respiratory irritation.
Specific target organ toxicity – repeated exposure: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard: Not classified (Based on available data, the classification criteria are not met)
Predicta™ Flow Dual Cure Bulk-fill Composite

Safety Data Sheet

 SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : This material has not been tested for environmental effects.

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Other information : Avoid release to the environment.

 SECTION 13: Disposal considerations

13.1. Disposal methods
Waste treatment methods : Dispose of contents/container in accordance with licensed collector’s sorting instructions.

 SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated

Transportation of Dangerous Goods
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated

 SECTION 15: Regulatory information

15.1. US Federal regulations
## Poly(α,α'-(1-methylethylidene)di-4,1-phenylene)bis[ω-(2-methyl-1-oxo-2-propenyl)oxy]-
(41637-38-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag | XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

### 15.2. International regulations

#### CANADA

| Poly(oxy-1,2-ethanediyl), α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-(2-methyl-1-oxo-2-propenyl)oxy]-
(41637-38-1) | Listed on the Canadian DSL (Domestic Substances List) |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dibenzoyl peroxide (94-36-0)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)</td>
<td>Listed on the Canadian NDSL (Non-Domestic Substances List)</td>
</tr>
<tr>
<td>2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (1565-94-2)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
</tbody>
</table>

#### EU-Regulations

No additional information available

<table>
<thead>
<tr>
<th>Dibenzoyl peroxide (94-36-0)</th>
<th>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (1565-94-2)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
</tbody>
</table>

#### National regulations

| Poly(oxy-1,2-ethanediyl), α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-(2-methyl-1-oxo-2-propenyl)oxy]-
(41637-38-1) | Listed on the AICS (Australian Inventory of Chemical Substances) |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
<td></td>
</tr>
<tr>
<td>Listed on the Japanese ENCS (Existing &amp; New Chemical Substances) inventory</td>
<td></td>
</tr>
<tr>
<td>Listed on the Japanese ISHL (Industrial Safety and Health Law)</td>
<td></td>
</tr>
<tr>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
<td></td>
</tr>
<tr>
<td>Listed on the TCSI (Taiwan Chemical Substance Inventory)</td>
<td></td>
</tr>
</tbody>
</table>

09 November 2018 EN (English US)
Dibenzoyl peroxide (94-36-0)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (1565-94-2)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations
No additional information available

SECTION 16: Other information
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 09 November 2018

Full text of H-phrases:

<table>
<thead>
<tr>
<th>H241</th>
<th>Heating may cause a fire or explosion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
## SECTION 1: Identification

### 1.1. Identification

<table>
<thead>
<tr>
<th>Product form</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade name</td>
<td>Predicta™ Flow Dual Cure Bulk-fill Composite – Base Component</td>
</tr>
</tbody>
</table>

### 1.2. Recommended use and restrictions on use

<table>
<thead>
<tr>
<th>Use of the substance/mixture</th>
<th>Dual-Cure Resin Composite Restorative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrictions on use</td>
<td>For professional use only</td>
</tr>
</tbody>
</table>

### 1.3. Supplier

- Parkell Inc.
- 300 Executive Drive
- Edgewood, NY 11717
- T (631) 249-1134

### 1.4. Emergency telephone number

| Emergency number | INFOTRAC 1-352-323-3500 (International) |
Predicta™ Flow Dual Cure Bulk-fill Composite

Safety Data Sheet

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

- Skin corrosion/irritation Category 2: Causes skin irritation
- Serious eye damage/eye irritation Category 1: Causes serious eye damage
- Skin sensitization, Category 1: May cause an allergic skin reaction
- Reproductive toxicity Category 2: Suspected of damaging fertility or the unborn child
- Specific target organ toxicity (single exposure) Category 3: May cause respiratory irritation

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

- Hazard pictograms (GHS-US):
  - Skin corrosion
  - Eye damage
  - Chemical symbol

- Signal word (GHS-US): Danger

- Hazard statements (GHS-US):
  - Causes skin irritation
  - May cause an allergic skin reaction
  - Causes serious eye damage
  - May cause respiratory irritation
  - Suspected of damaging fertility or the unborn child

- Precautionary statements (GHS-US):
  - Obtain special instructions before use.
  - Do not handle until all safety precautions have been read and understood.
  - Avoid breathing mist, vapors.
  - Wash hands thoroughly after handling.
  - Use only outdoors or in a well-ventilated area.
  - Contaminated work clothing must not be allowed out of the workplace.
  - Wear protective gloves.
  - If on skin: Wash with plenty of water.
  - If inhaled: Remove person to fresh air and keep comfortable for breathing.
  - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - If exposed or concerned: Get medical advice/attention.
  - Call a doctor, a POISON CENTER if you feel unwell.
  - If skin irritation or rash occurs: Get medical advice/attention.
  - Take off contaminated clothing and wash it before reuse.
  - Store in a well-ventilated place. Keep container tightly closed.
  - Store locked up.
  - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

- Other hazards not contributing to the classification: Additional hazards when processed. Dust explosion possible if in powder or granular form, mixed with air. Titanium dioxide is in a form that is not available for respiration.

2.4. Unknown acute toxicity (GHS US)

- Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

- Not applicable

3.2. Mixtures

Not applicable
**SECTION 4: First-aid measures**

### 4.1. Description of first aid measures

- **First-aid measures after inhalation**: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
- **First-aid measures after skin contact**: Immediately rinse with plenty of water (for at least 15 minutes). Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. If skin irritation or rash occurs: Get medical advice/attention.
- **First-aid measures after eye contact**: In case of eye contact, immediately rinse with clean water for 20-30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- **First-aid measures after ingestion**: Rinse mouth. If swallowed: rinse mouth. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

- **Symptoms/effects**: Suspected of damaging fertility or the unborn child.
- **Symptoms/effects after inhalation**: May cause respiratory irritation. May cause an allergic skin reaction.
- **Symptoms/effects after skin contact**: Causes skin irritation. May cause an allergic skin reaction.
- **Symptoms/effects after eye contact**: Causes serious eye damage.
- **Symptoms/effects after ingestion**: May cause gastric irritation.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.
### SECTION 5: Fire-fighting measures

<table>
<thead>
<tr>
<th>5.1. Suitable (and unsuitable) extinguishing media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable extinguishing media</td>
</tr>
<tr>
<td>Unsuitable extinguishing media</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5.2. Specific hazards arising from the chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire hazard</td>
</tr>
<tr>
<td>Explosion hazard</td>
</tr>
<tr>
<td>Reactivity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5.3. Special protective equipment and precautions for fire-fighters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firefighting instructions</td>
</tr>
<tr>
<td>Protection during firefighting</td>
</tr>
</tbody>
</table>

### SECTION 6: Accidental release measures

<table>
<thead>
<tr>
<th>6.1. Personal precautions, protective equipment and emergency procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>General measures</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6.1.1. For non-emergency personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency procedures</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6.1.2. For emergency responders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective equipment</td>
</tr>
<tr>
<td>Emergency procedures</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6.2. Environmental precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevent entry to sewers and public waters.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6.3. Methods and material for containment and cleaning up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods for cleaning up</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6.4. Reference to other sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>For further information refer to section 8: &quot;Exposure controls/personal protection&quot;. For disposal of residues refer to section 13: &quot;Disposal considerations&quot;.</td>
</tr>
</tbody>
</table>
SECTION 7: Handling and storage

7.1 Precautions for safe handling

Additional hazards when processed: Avoid creating or spreading dust. Dust may form flammable and explosive mixture with air.

Precautions for safe handling: Provide good ventilation in process area to prevent formation of vapor. Avoid breathing mist, vapors, spray.

Hygiene measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Keep only in the original container in a cool, well ventilated place away from incompatible materials. Keep container tightly closed. Keep away from heat.

Incompatible materials: Strong oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>Local name</th>
<th>TWA (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(oxy-1,2-ethanediyl), .alpha,.alpha.'-[1-methylethylidene]di-4,1-phenylene]bis[omega.-{(2-methyl-1-oxo-2-propenyl)oxy]- (41637-38-1)</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Propenoic acid, 2-methyl-, 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl ester (72869-86-4)</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Hydroxyethyl methacrylate (868-77-9)</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethanol, 2,2'-(4-methylphenyl)limino]bis- (3077-12-1)</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicyclo[2.2.1]heptane-2,3-dione, 1,7,7-trimethyl-, (+.-) (10373-78-1)</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide (75980-60-8)</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide (13463-67-7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>Local name</td>
<td>TWA (mg/m³)</td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>ACGIH TWA</td>
<td>10 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>
8.2. Appropriate engineering controls

Appropriate engineering controls: Either local exhaust or general room ventilation is usually required. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Impermeable protective gloves

Eye protection:
Chemical goggles or safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
Wear appropriate mask. Where excessive vapor, mist, or dust may result, use approved respiratory protection equipment

Other information:
Do not eat, drink or smoke during use.
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>gel. Paste.</td>
</tr>
<tr>
<td>Color</td>
<td>natural color</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

May polymerize on exposure to temperature rise.
10.4. **Conditions to avoid**

Additional hazards when processed. Avoid dust formation.

10.5. **Incompatible materials**

Strong oxidizing agents.

10.6. **Hazardous decomposition products**

No hazardous decomposition products known at room temperature. On combustion, forms: carbon oxides (CO and CO2).

SECTION 11: Toxicological information

11.1. **Information on toxicological effects**

- **Acute toxicity (oral)**: Not classified (Based on available data, the classification criteria are not met)
- **Acute toxicity (dermal)**: Not classified (Based on available data, the classification criteria are not met)
- **Acute toxicity (inhalation)**: Not classified (Based on available data, the classification criteria are not met)

<table>
<thead>
<tr>
<th>Compound</th>
<th>LD50 oral rat</th>
<th>LD50 dermal rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Hydroxyethyl methacrylate</td>
<td>5050 mg/kg</td>
<td>&gt; 3 g/kg</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 10000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>&gt; 10000 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

- **Skin corrosion/irritation**: Causes skin irritation.
- **Serious eye damage/irritation**: Causes serious eye damage.
- **Respiratory or skin sensitization**: May cause an allergic skin reaction.
- **Germ cell mutagenicity**: Not classified (Based on available data, the classification criteria are not met)
- **Carcinogenicity**: Not classified. (Based on available data, the classification criteria are not met) Titanium dioxide is in a form that is not available for respiration

<table>
<thead>
<tr>
<th>Compound</th>
<th>Specific target organ toxicity – single exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-{(2-methyl-1-oxo-2-propenyl)oxy]- (41637-38-1)</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>Bicyclo[2.2.1]heptane-2,3-dione, 1,7,7-trimethyl-, (+)- (10373-78-1)</td>
<td>May cause respiratory irritation.</td>
</tr>
</tbody>
</table>

- **Reproductive toxicity**: Suspected of damaging fertility or the unborn child.
- **Specific target organ toxicity – repeated exposure**: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)
Viscosity, kinematic : No data available

Likely routes of exposure : Inhalation. Ingestion. Skin and eye contact.
Symptoms/effects : Suspected of damaging fertility or the unborn child.
Symptoms/effects after inhalation : May cause respiratory irritation. May cause an allergic skin reaction.
Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Causes serious eye damage.
Symptoms/effects after ingestion : May cause gastric irritation.

**SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - general : This material has not been tested for environmental effects.

#### 2-Hydroxyethyl methacrylate (868-77-9)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>213 - 242 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>227 mg/l (Exposure time: 96 h - Species: Pimephales promelas)</td>
</tr>
</tbody>
</table>

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

#### 2-Hydroxyethyl methacrylate (868-77-9)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 1</td>
<td>1.34 - 1.54</td>
</tr>
<tr>
<td>Log Pow</td>
<td>0.47</td>
</tr>
</tbody>
</table>

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Other information : Avoid release to the environment.
SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods: Dispose of contents/container in accordance with licensed collector’s sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethyldiene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenylox)- (41637-38-1)]

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-Propenoic acid, 2-methyl-, 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl ester (72869-86-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-Hydroxyethyl methacrylate (868-77-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Ethanol, 2,2'-(4-methylphenyl)iminobis- (3077-12-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Bicyclo[2.2.1]heptane-2,3-dione, 1,7,7-trimethyl-, (+-)- (10373-78-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag PMN

diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide (75980-60-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag PMN
15.2. International regulations

**CANADA**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Inventory Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(oxy-1,2-ethanediyl), α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[omega-[(2-methyl-1-oxo-2-propenyl)oxy]- (14637-38-1)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)</td>
<td>Listed on the Canadian NDSL (Non-Domestic Substances List)</td>
</tr>
<tr>
<td>2-Propenoic acid, 2-methyl-, 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diy1 ester (72869-86-4)</td>
<td>Listed on the Canadian NDSL (Non-Domestic Substances List)</td>
</tr>
<tr>
<td>2-Hydroxyethyl methacrylate (868-77-9)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Ethanol, 2,2'-(4-methylphenyl)imino]bis- (3077-12-1)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Bicyclo[2.2.1]heptane-2,3-dione, 1,7,7-trimethyl-, (+-.)- (10373-78-1)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide (75980-60-8)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Titanium dioxide (13463-67-7)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
</tbody>
</table>

**EU-Regulations**

No additional information available

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Inventory Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>2-Propenoic acid, 2-methyl-, 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diy1 ester (72869-86-4)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>2-Hydroxyethyl methacrylate (868-77-9)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>Ethanol, 2,2'-(4-methylphenyl)imino]bis- (3077-12-1)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>Bicyclo[2.2.1]heptane-2,3-dione, 1,7,7-trimethyl-, (+-.)- (10373-78-1)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide (75980-60-8)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
</tbody>
</table>
### Titanium dioxide (13463-67-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

### National regulations

*Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-*(41637-38-1)*]

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

**2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)**

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

**2-Propenoic acid, 2-methyl-, 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl ester (72869-86-4)**

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

**2-Hydroxyethyl methacrylate (868-77-9)**

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

**Ethanol, 2,2'-(4-methylphenyl)imino)bis- (3077-12-1)**

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

**Bicyclo[2.2.1]heptane-2,3-dione, 1,7,7-trimethyl-, (+-)- (10373-78-1)**

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
15.3. US State regulations

<table>
<thead>
<tr>
<th>Titanium dioxide (13463-67-7)</th>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>No significant risk level (NSRL)</th>
<th>Maximum allowable dose level (MADL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, not airborne, not unbound</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No, not airborne, not unbound</td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Revision date: 9 November 2018

Full text of H-phrases:

<table>
<thead>
<tr>
<th>H302</th>
<th>Harmful if swallowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer</td>
</tr>
<tr>
<td>H361</td>
<td>Suspected of damaging fertility or the unborn child</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.