SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: ULTRASTAR UV FPG FP-78240 Silver

Material number: 021207HW0

1.2 Relevant identified uses of the substance or mixture and uses advised against

This information is not available.

1.3 Details of the supplier of the safety data sheet

Company: ECKART GmbH
Guentersthal 4
91235 Hartenstein

Telephone: +499152770

Telefax: +499152777008

E-mail address of person responsible for the SDS: msds.eckart@altana.com

1.4 Emergency telephone number

GBK Gefahrgut Büro GmbH, Ingelheim, Germany:
From outside US: (001) 352-323-3500
(First call in English, response in your language is possible)
US & Canada (toll free): 1-800-5355-053

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2: H315: Causes skin irritation.
Eye irritation, Category 2: H319: Causes serious eye irritation.
Skin sensitisation, Category 1: H317: May cause an allergic skin reaction.
Chronic aquatic toxicity, Category 2: H411: Toxic to aquatic life with long lasting effects.

Classification (67/548/EEC, 1999/45/EC)

Irritant: R36: Irritating to eyes.
Dangerous for the environment: R51/53: Toxic to aquatic organisms, may cause
long-term adverse effects in the aquatic environment.

Irritant
R43: May cause sensitisation by skin contact.

Sensitising

2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

<table>
<thead>
<tr>
<th>Hazard pictograms</th>
<th>Signal word</th>
<th>Hazard statements</th>
<th>Precautionary statements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>H317: May cause an allergic skin reaction.</td>
<td>Response: P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H319: Causes serious eye irritation.</td>
<td>Response: P337 + P313 If eye irritation persists: Get medical advice/attention.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H411: Toxic to aquatic life with long lasting effects.</td>
<td>Disposal: P362 + P364 Take off contaminated clothing and wash it before reuse.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Response: P391 Collect spillage.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disposal: P501 Dispose of contents/container to an approved waste disposal plant.</td>
</tr>
</tbody>
</table>

Hazardous components which must be listed on the label:

- Propyldidynetrimethanol, ethoxylated, esters with acrylic acid 28961-43-5
- Monoalkyl or monoaryl or monoalkylaryl esters of acrylic acid 64194-22-5
- Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide 162881-26-7
- Glycerol, propoxylated, esters with acrylic acid 52408-84-1
2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Classification (67/548/EEC)</th>
<th>Classification (REGULATION (EC) No 1272/2008)</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylidynetrimethanol, ethoxylated, esters with acrylic acid</td>
<td>28961-43-5 500-066-5 01-2119489900-30</td>
<td>Xi; Xi; R36-R43</td>
<td>Eye Irrit. 2; H319 Skin Sens. 1; H317</td>
<td>&gt;= 25 - &lt; 50</td>
</tr>
<tr>
<td>2-Propenoic acid, polymer with 2,2-bis(hydroxymethyl)-1,3-propanediol, methylolxirane and oxirane</td>
<td>144086-02-2 604-394-0 01-2119979050-40</td>
<td>Xi; R36 N; R51/53</td>
<td>Eye Irrit. 2A; H319 Aquatic Chronic 2; H411</td>
<td>&gt;= 20 - &lt; 25</td>
</tr>
<tr>
<td>monoalkyl or monoaryl or monoalkylaryl esters of acrylic acid</td>
<td>64194-22-5 264-727-7 01-2120117435-63</td>
<td>Xi; R36/37/38 N; R51-R53</td>
<td>Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1A; H317 Aquatic Chronic 3; H412</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
<tr>
<td>Alkoxyalted multifunctional acrylate oligomer</td>
<td>104634-06-2</td>
<td>Xi; Xi; R36/38</td>
<td>Skin Irrit. 2; H315 Eye Irrit. 2; H319</td>
<td>&gt;= 1 - 10</td>
</tr>
<tr>
<td>phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide</td>
<td>162881-26-7 423-340-5 01-2119489401-38</td>
<td>R43 R53</td>
<td>Skin Sens. 1A; H317 Aquatic Chronic 4; H413</td>
<td>&gt;= 2.5 - &lt; 10</td>
</tr>
<tr>
<td>Glycerol, propoxylated, esters with acrylic acid</td>
<td>52408-84-1 500-114-5 01-2119487948-12</td>
<td>Xi; Xi; R36 Xi; R43</td>
<td>Eye Irrit. 2; H319 Skin Sens. 1; H317</td>
<td>&gt;= 1 - 10</td>
</tr>
<tr>
<td>2-hydroxy-1-(4-(4-(2-hydroxy-2-methylpropiony1)benzyl)phenyl)-2-methylpropan-1-one</td>
<td>474510-57-1 444-860-9 01-2119904050-59</td>
<td>Xn; R48/22 N; R50-R53</td>
<td>STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410</td>
<td>&gt;= 2.5 - &lt; 10</td>
</tr>
<tr>
<td>1-isopropyl-2,2-dimethyltrimethylene diisobutyrate</td>
<td>6846-50-0 229-934-9 01-2119451093-47</td>
<td></td>
<td>Aquatic Chronic 3; H412</td>
<td>&gt;= 1 - &lt; 2.5</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: Move out of dangerous area. Show this safety data sheet to the doctor in attendance.

If inhaled: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of skin contact: If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact: Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed: Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed
This information is not available.

4.3 Indication of any immediate medical attention and special treatment needed
This information is not available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: This information is not available.

Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: Do not allow run-off from fire fighting to enter drains or water courses.
5.3 Advice for firefighters

**Special protective equipment for firefighters**: Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

---

**SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures

**Personal precautions**: Use personal protective equipment.

6.2 Environmental precautions

**Environmental precautions**: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

**Methods for cleaning up**: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

This information is not available.

---

**SECTION 7: Handling and storage**

7.1 Precautions for safe handling

**Advice on safe handling**: Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

**Advice on protection against fire and explosion**: Normal measures for preventive fire protection.
Hygiene measures: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

Other data: No decomposition if stored and applied as directed.

7.3 Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

**Occupational Exposure Limits**

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis (Version Date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5</td>
<td>TWA (Inhalable)</td>
<td>10 mg/m3</td>
<td>GB EH40 (2011-12-01)</td>
</tr>
</tbody>
</table>

Further information: The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m⁻³ 8-hour TWA of inhalable dust or 4 mg.m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis (Version Date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5</td>
<td>TWA (Respirable)</td>
<td>4 mg/m3</td>
<td>GB EH40 (2011-12-01)</td>
</tr>
</tbody>
</table>

Further information: The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m⁻³ 8-hour TWA of inhalable dust or 4 mg.m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis (Version Date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5</td>
<td>TWA (Inhalable)</td>
<td>10 mg/m3</td>
<td>GB EH40 (2005-04-06)</td>
</tr>
</tbody>
</table>

Further information: For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m⁻³ 8-hour TWA of inhalable dust or 4 mg.m⁻³ 8-hour TWA of respirable dust.
This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3. Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

<table>
<thead>
<tr>
<th>aluminium powder (stabilised)</th>
<th>7429-90-5</th>
<th>TWA (Respirable)</th>
<th>4 mg/m³</th>
<th>GB EH40 (2005-04-06)</th>
</tr>
</thead>
</table>

Further information: For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg·m⁻³ 8-hour TWA of inhalable dust or 4 mg·m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3. Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

<table>
<thead>
<tr>
<th>aluminium powder (stabilised)</th>
<th>7429-90-5</th>
<th>TWA (Inhalable dust)</th>
<th>10 mg/m³</th>
<th>GB EH40 (2011-12-01)</th>
</tr>
</thead>
</table>

Further information: For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg·m⁻³ 8-hour TWA of inhalable dust or 4 mg·m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3. Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.
and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhaleable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

Further information

For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m$^{-3}$ 8-hour TWA of inhalable dust or 4 mg.m$^{-3}$ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhaleable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

<table>
<thead>
<tr>
<th>Substance name</th>
<th>End Use</th>
<th>Exposure routes</th>
<th>Potential health effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propyldinetrimethanol, ethoxylated, esters with acrylic acid (28961-43-5)</td>
<td>Workers</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>0.8 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Inhalation</td>
<td>long term – systemic effects</td>
<td>16.2 mg/m3</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>0.5 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Inhalation</td>
<td>long term – systemic effects</td>
<td>4.9 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Ingestion</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td>2-Propenoic acid, polymer with 2,2-bis(hydroxymethyl)-1,3-propanediol, methyloxirane and oxirane (144086-02-2)</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Skin contact</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Inhalation</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Skin contact</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Ingestion</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td>3-methyl-1,5-pentanediyl diacrylate (64194-22-5)</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Inhalation</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Skin contact</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Ingestion</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td>phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)</td>
<td>Workers</td>
<td>Skin contact</td>
<td>short term – systemic effects acute</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Inhalation</td>
<td>short term – systemic effects acute</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Ingestion</td>
<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td>Glycerol, propoxylated, esters with acrylic acid (52408-84-1)</td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long term – systemic effects</td>
<td></td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET  
according to Regulation (EC) No. 1907/2006

ULTRASTAR UV FPG FP-78240 Silver

Consumers  
Ingestion  
long term – systemic effects  
1.39 mg/kg

Consumers  
Skin contact  
long term – systemic effects  
1.15 mg/kg

Consumers  
Inhalation  
long term – systemic effects  
4.87 mg/m3

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0)  
Workers  
Skin contact  
long term – systemic effects  
31.20 mg/kg

Workers  
Inhalation  
long term – systemic effects  
110 mg/m3

Consumers  
Ingestion  
long term – systemic effects  
18.8 mg/kg

Consumers  
Skin contact  
long term – systemic effects  
18.8 mg/kg

Consumers  
Inhalation  
long term – systemic effects  
32.60 mg/m3

aluminium (7429-90-5)  
Workers  
Inhalation  
long term – local effects  
3.72 mg/m3

Consumers  
Oral  
long term – systemic effects  
3.95 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Environmental Compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylidinetrimethanol, ethoxylated, esters with acrylic acid (28961-43-5)</td>
<td>Soil</td>
<td>0.00587 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Fresh water</td>
<td>0.00195 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>0.0082 mg/kg</td>
</tr>
<tr>
<td></td>
<td>STP</td>
<td>10 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0.000195 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>0.00082 mg/kg</td>
</tr>
<tr>
<td>2-Propenoic acid, polymer with 2,2-bis(hydroxymethyl)-1,3-propanediol, methyloxirane and oxirane (144086-02-2)</td>
<td>Fresh water</td>
<td>0.0079 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0.00079 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>0.119 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>0.0119 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>0.0192 mg/kg</td>
</tr>
<tr>
<td>Glycerol, propoxylated, esters with acrylic acid (52408-84-1)</td>
<td>Soil</td>
<td>0.00111 mg/kg</td>
</tr>
</tbody>
</table>
### 8.2 Exposure controls

**Personal protective equipment**

- **Eye protection**: Wear face-shield and protective suit for abnormal processing problems.

- **Hand protection**
  - **Remarks**: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

- **Skin and body protection**: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

- **Respiratory protection**: This information is not available.

- **Environmental exposure controls**: This information is not available.

### SECTION 9: Physical and chemical properties

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

- **Appearance**: liquid
- **Colour**: silver
- **Odour**: characteristic
- **Odour Threshold**: No data available
- **pH**: No data available
- **Freezing point**: No data available
- **Boiling point/boiling range**: > 100 °C
- **Flash point**: > 100 °C
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

ULTRASTAR UV FPG FP-78240 Silver

Evaporation rate: No data available
Flammability (solid, gas): No data available
Auto-flammability: No data available
Upper explosion limit: No data available
Lower explosion limit: No data available
Vapour pressure: No data available
Relative vapour density: No data available
Relative density: No data available
Density: No data available
Bulk density: No data available
Solubility(ies)
  Water solubility: insoluble
  Solubility in other solvents: No data available
Partition coefficient: n-octanol/water: No data available
Ignition temperature: No data available
Decomposition temperature: No data available
Viscosity
  Viscosity, dynamic: No data available
    Viscosity, kinematic: > 21 mm²/s (40 °C)
Flow time: 60 s
  Cross section: 4 mm
  Method: DIN 53211
Explosive properties: No data available
Oxidizing properties: No data available

9.2 Other information
No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No decomposition if stored and applied as directed.

10.2 Chemical stability
No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions
Hazardous reactions: No decomposition if stored and applied as directed.

10.4 Conditions to avoid
Conditions to avoid: No data available

10.5 Incompatible materials
Materials to avoid: This information is not available.

10.6 Hazardous decomposition products
Contact with water or humid air: This information is not available.
SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

**Components:**

- **162881-26-7:**
  - Acute oral toxicity: LD50 (Rat): > 2,000 mg/kg
  - Method: OECD Test Guideline 401

- **474510-57-1:**
  - Acute oral toxicity: LD50 (Rat): > 2,000 mg/kg
  - Acute dermal toxicity: LD50 (Rat): > 2,000 mg/kg

- **6846-50-0:**
  - Acute oral toxicity: LD50 (Rat): > 2,000 mg/kg
  - Acute dermal toxicity: LD50 Dermal (Rabbit): > 2,000 mg/kg
  - Method: OECD Test Guideline 402

Skin corrosion/irritation

**Product:**

Remarks: May cause skin irritation and/or dermatitis.

**Components:**

- **28961-43-5:**
  - Remarks: May cause skin irritation and/or dermatitis.

- **144086-02-2:**
  - Remarks: May cause skin irritation in susceptible persons.

- **6846-50-0:**
  - Species: Rabbit
  - Exposure time: 4 h
  - Method: OECD Test Guideline 404
  - Result: No skin irritation

Serious eye damage/eye irritation

**Product:**
Remarks: Eye irritation

**Components:**
- **28961-43-5:**
  Remarks: May cause irreversible eye damage.

- **144086-02-2:**
  Remarks: May cause irreversible eye damage.

- **6846-50-0:**
  Species: Rabbit  
  Exposure time: 72 h  
  Method: OECD Test Guideline 405  
  Result: No eye irritation

**Respiratory or skin sensitisation**

**Product:**
Remarks: Causes sensitisation.

**Components:**
- **28961-43-5:**
  Remarks: Causes sensitisation.

**Further information**

**Product:**
Remarks: No data available

**Components:**
- **28961-43-5:**
  Remarks: No data available

- **144086-02-2:**
  Remarks: No data available

**SECTION 12: Ecological information**

**12.1 Toxicity**
No data available

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available
12.5 Results of PBT and vPvB assessment

**Product:**

**Assessment:** This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

**Product:**

**Additional ecological information:** Remarks: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

**Components:**

- 28961-43-5:
  - Additional ecological information: Remarks: No data available

- 144086-02-2:
  - Additional ecological information: Remarks: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

**European Waste Catalogue:** 08 03 12 - waste ink containing dangerous substances

13.1 Waste treatment methods

**Product:**

- The product should not be allowed to enter drains, water courses or the soil.
- Do not contaminate ponds, waterways or ditches with chemical or used container.
- Send to a licensed waste management company.
- In accordance with local and national regulations.

**Contaminated packaging:**

- Empty remaining contents.
- Dispose of as unused product.
- Do not re-use empty containers.
- In accordance with local and national regulations.

SECTION 14: Transport information

14.1 UN number

- **ADR:** UN 3082
- **IMDG:** UN 3082
- **IATA:** UN 3082
14.2 UN proper shipping name

ADR: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(2-hydroxy-1-(4-(4-(2-hydroxy-2-methylpropionyl)benzyl)phenyl)-2-methylpropan-1-one)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(2-hydroxy-1-(4-(4-(2-hydroxy-2-methylpropionyl)benzyl)phenyl)-2-methylpropan-1-one)

IATA: Environmentally hazardous substance, liquid, n.o.s.
(2-hydroxy-1-(4-(4-(2-hydroxy-2-methylpropionyl)benzyl)phenyl)-2-methylpropan-1-one)

14.3 Transport hazard class(es)

ADR: 9
IMDG: 9
IATA: 9

14.4 Packing group

ADR
Packing group: III
Classification Code: M6
Hazard Identification Number: 90
Labels: 9

IMDG
Packing group: III
Labels: 9
EmS Number: F-A,S-F

IATA
Packing instruction (cargo aircraft): 964
Packing instruction (passenger aircraft): 964
Packing instruction (LQ): Y964
Packing group: III
Labels: Miscellaneous Dangerous Goods

14.5 Environmental hazards

ADR
Environmentally hazardous: yes

IMDG
Marine pollutant: yes

14.6 Special precautions for user

Remarks: For single packagings <=5L / 5 kg, or combination packagings containing inner packagings <= 5L / 5 kg net per inner packaging, SV375 ADR, 2.10.2.7 IMDG-Code, A197 IATA-DGR may be applied.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59): Not applicable

15.2 Chemical safety assessment
This information is not available.

SECTION 16: Other information

Full text of R-Phrases
R11 : Highly flammable.
R36 : Irritating to eyes.
R36/37/38 : Irritating to eyes, respiratory system and skin.
R36/38 : Irritating to eyes and skin.
R43 : May cause sensitisation by skin contact.
R48/22 : Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50 : Very toxic to aquatic organisms.
R51 : Toxic to aquatic organisms.
R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53 : May cause long-term adverse effects in the aquatic environment.

Full text of H-Statements
H228 : Flammable solid.
H315 : Causes skin irritation.
H317 : May cause an allergic skin reaction.
H319 : Causes serious eye irritation.
H373 : May cause damage to organs through prolonged or repeated exposure.
H400 : Very toxic to aquatic life.
H410 : Very toxic to aquatic life with long lasting effects.
H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.
H413 : May cause long lasting harmful effects to aquatic life.

Full text of other abbreviations
Aquatic Acute : Acute aquatic toxicity
Aquatic Chronic : Chronic aquatic toxicity
Eye Irrit. : Eye irritation
Flam. Sol. : Flammable solids
Skin Irrit. : Skin irritation
Skin Sens. : Skin sensitisation
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

ULTRASTAR UV FPG FP-78240 Silver

Version 3.1 Revision Date: 07.09.2017 SDS Number: 102000022539 Print Date: 19.11.2018 Date of first issue: 17.12.2014

STOT RE : Specific target organ toxicity - repeated exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GB / EN