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

### 1.1. Product identifier

wallTastic UV ink White

UFI: A300-P0FU-V00R-GW36

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

**Use of the substance/mixture**

Ink jet colour
Industrial uses

**Uses advised against**

all uses which are not mentioned above

### 1.3. Details of the supplier of the safety data sheet

| | | |
|---|---|---|
| Company name: | wallPen GmbH | |
| Street: | Werkstr. 15 | |
| Place: | D-57537 Wissen | |
| Telephone: | +49 2742 966800 | |
| E-mail: | info@wallpen.com | |
| Contact person: | Zentrale | Telephone: +49 2742 966800 |
| E-mail: | info@wallpen.com | |
| Internet: | https://www.wallpen.com/de | |
| Responsible Department: | management | |

### 1.4. Emergency telephone number:

+49 2742 966800 (Mo.-Fr. 7-17:00)

**Further Information**

No information available.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**GB CLP Regulation**

Skin Irrit. 2; H315
Eye Irrit. 2; H319
Skin Sens. 1; H317
Carc. 2; H351
Repr. 1B; H360Fd
STOT SE 3; H335
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

**GB CLP Regulation**

**Hazard components for labelling**

2-(2-Vinyloxyethoxy)ethyl acrylate
3-methyl-1,5-pentanediyl diacrylate
2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

**Signal word:** Danger

**Pictograms:**



**Hazard statements**

| | |
|---|---|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer. |
| H360Fd | May damage fertility. Suspected of damaging the unborn child. |
| H411 | Toxic to aquatic life with long lasting effects. |

**Precautionary statements**

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves and eye protection/face protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of water and soap. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P391 | Collect spillage. |

**Special labelling of certain mixtures**

| | |
|---|---|
| EUH211 | Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.<br>Restricted to professional users. |

### 2.3. Other hazards

Endocrine disrupting properties: 2,6-di-tert-butyl-p-cresol.
Results of PBT and vPvB assessment
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.
This product contains a substance that has endocrine disrupting properties with respect to humans.
2,6-di-tert-butyl-p-cresol SVHC substance. (List II) (5-<10%)

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

**Relevant ingredients**

| CAS No | Chemical name | | | Quantity |
|---|---|---|---|---|
| | EC No | Index No | REACH No | |
| | Classification (GB CLP Regulation) | | | |
| 86273-46-3 | 2-(2-Vinyloxyethoxy)ethyl acrylate | | | 25 - < 30 % |
| | 451-690-9 | | 01-2119441302-54 | |
| | Acute Tox. 4, Skin Sens. 1, Aquatic Chronic 3; H302 H317 H412 | | | |
| 13463-67-7 | titanium dioxide | | | 15 - < 20 % |
| | 236-675-5 | 022-006-00-2 | 01-2119489379-17 | |
| | Carc. 2; H351 | | | |
| 64194-22-5 | 3-methyl-1,5-pentanediyl diacrylate | | | 15 - < 20 % |
| | 264-727-7 | | 01-2119441302-54 | |
| | Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1A, STOT SE 3, Aquatic Chronic 3; H332 H315 H319 H317 H335 H412 | | | |
| 15625-89-5 | 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate | | | 5 - < 10 % |
| | 239-701-3 | 607-111-00-9 | 01-2119489896-11 | |
| | Carc. 2, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H351 H315 H319 H317 H400 H410 | | | |
| 84434-11-7 | Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate | | | 5 - < 10 % |
| | 282-810-6 | | 01-2119987994-10 | |
| | Skin Sens. 1B, Aquatic Chronic 2; H317 H411 | | | |
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | | | 5 - < 10 % |
| | 278-355-8 | 015-203-00-X | 01-2119972295-29 | |
| | Repr. 1B, Skin Sens. 1B, Aquatic Chronic 2; H360Fd H317 H411 | | | |
| 67906-98-3 | 2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol | | | 2.5 - < 5 % |
| | 630-518-8 | | | |
| | Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Chronic 3; H315 H319 H317 H335 H412 | | | |
| 57472-68-1 | Oxybis(methyl-2,1-ethanediyl) diacrylate | | | 0.3 - < 1 % |
| | 260-754-3 | | 01-2119484629-21 | |
| | Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1; H315 H318 H317 | | | |
| 77-99-6 | Propylidynetrimethanol | | | 0.3 - < 1 % |
| | 201-074-9 | | 01-2119486799-10 | |
| | Repr. 2; H361fd | | | |
| 128-37-0 | 2,6-di-tert-butyl-p-cresol | | | 0.1 - < 0.3 % |
| | 204-881-4 | | 01-2119565113-46 | |
| | Aquatic Acute 1, Aquatic Chronic 1; H400 H410 | | | |

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

| CAS No | EC No | Chemical name | Quantity |
|---|---|---|---|
| | Specific Conc. Limits, M-factors and ATE | | |
| 86273-46-3 | 451-690-9 | 2-(2-Vinyloxyethoxy)ethyl acrylate | 25 - < 30 % |
| | dermal: LD50 = >2000 mg/kg; oral: LD50 = 1790 mg/kg | | |
| 13463-67-7 | 236-675-5 | titanium dioxide | 15 - < 20 % |
| | inhalation: LC50 = >6,82 mg/l (dusts or mists); dermal: LD50 = >10000 mg/kg; oral: LD50 = > 2000 mg/kg | | |
| 64194-22-5 | 264-727-7 | 3-methyl-1,5-pentanediyl diacrylate | 15 - < 20 % |
| | inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists) | | |
| 15625-89-5 | 239-701-3 | 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate | 5 - < 10 % |
| | dermal: LD50 = >6000 mg/kg; oral: LD50 = > 3000 mg/kg Aquatic Acute 1; H400: M=1 Aquatic Chronic 1; H410: M=1 | | |
| 84434-11-7 | 282-810-6 | Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate | 5 - < 10 % |
| | dermal: LD50 = >= 2000 mg/kg; oral: LD50 = > 5000 mg/kg | | |
| 75980-60-8 | 278-355-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | 5 - < 10 % |
| | dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg | | |
| 57472-68-1 | 260-754-3 | Oxybis(methyl-2,1-ethanediyl) diacrylate | 0.3 - < 1 % |
| | dermal: LD50 = > 2000 mg/kg; oral: LD50 = 3530 mg/kg | | |
| 77-99-6 | 201-074-9 | Propylidynetrimethanol | 0.3 - < 1 % |
| | dermal: LD50 = > 10000 mg/kg; oral: LD50 = ca. 14700 mg/kg | | |
| 128-37-0 | 204-881-4 | 2,6-di-tert-butyl-p-cresol | 0.1 - < 0.3 % |
| | dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 6000 mg/kg Aquatic Acute 1; H400: M=1 Aquatic Chronic 1; H410: M=1 | | |

**Further Information**

REGULATION (EC) No 166/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC
The product contains:: titanium dioxide (10-<20%)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information**

First aider: Pay attention to self-protection! Wear personal protection equipment (refer to section 8).
Provide fresh air.
Remove contaminated, saturated clothing immediately.
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**After inhalation**

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

If unconscious but breathing normally, place in recovery position and seek medical advice.

**After contact with skin**

IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
Solvents/Thinner
Wash contaminated clothing before reuse.
In case of skin irritation, consult a physician.

**After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
Remove contact lenses, if present and easy to do. Continue rinsing.

**After ingestion**

Call a physician immediately. Rinse mouth. Never give anything by mouth to an unconscious person or a person with cramps. Put victim at rest, cover with a blanket and keep warm.

Observe risk of aspiration if vomiting occurs.

**4.2. Most important symptoms and effects, both acute and delayed**

No information available.

**4.3. Indication of any immediate medical attention and special treatment needed**

First Aid, decontamination, treatment of symptoms.

## SECTION 5: Firefighting measures

**5.1. Extinguishing media**

**Suitable extinguishing media**

Dry extinguishing powder, Carbon dioxide (CO2), Water spray jet
In case of major fire and large quantities: alcohol resistant foam, Water spray jet

**Unsuitable extinguishing media**

Full water jet

**5.2. Special hazards arising from the substance or mixture**

Hazardous combustion products: Gases/vapours, harmful

**5.3. Advice for firefighters**

Special protective equipment for firefighters: Flame-retardant protective clothing
In case of fire: Wear self-contained breathing apparatus.
Remove persons to safety.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Dispose of waste according to applicable legislation.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

**General advice**

See protective measures under point 7 and 8.
Wear personal protection equipment (refer to section 8).
Avoid contact with skin, eyes and clothes.
Provide adequate ventilation.
In case of inadequate ventilation wear respiratory protection. Remove all sources of ignition.
To follow: Emergency procedures

**For non-emergency personnel**

Remove persons to safety. Keep away from unprotected people. Keep upwind.

**For emergency responders**

To follow: Emergency procedures
Suppress gases/vapours/mists with water spray jet.
The danger areas must be delimited and identified using relevant warning and safety signs.

**6.2. Environmental precautions**

Do not allow to enter into soil/subsoil.
Do not allow to enter into surface water or drains.
Cover drains.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

### 6.3. Methods and material for containment and cleaning up

**For containment**

Stop leak if safe to do so. Wipe up with absorbent material (eg. cloth, fleece).

Handling larger quantities: Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal. Treat the recovered material as prescribed in the section on waste disposal. Don't store containers without labelling.

**For cleaning up**

Wash with plenty of water. Clean with detergents. Avoid solvent cleaners.
Retain contaminated washing water and dispose it.

**Other information**

Provide fresh air.

### 6.4. Reference to other sections

See protective measures under point 7 and 8.
Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on safe handling**

To follow: Restrictions of occupation
Wear personal protection equipment (refer to section 8).
Keep container tightly closed.
Provide adequate ventilation. In case of inadequate ventilation wear respiratory protection.
Minimum room ventilation rate for handling/application (air changes per hour): 10 x
Undertake operation under enclosed conditions. Transfer and handle product only in closed systems.
Avoid contact with skin, eyes and clothes.
Clear spills immediately. Avoid release to the environment.

**Advice on protection against fire and explosion**

Usual measures for fire prevention.

**Advice on general occupational hygiene**

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.
Work in well-ventilated zones or use proper respiratory protection.
Only wear fitting, comfortable and clean protective clothing.
Street clothing should be stored separately from work clothing.
Avoid contact with skin, eyes and clothes.
Wash hands and face before breaks and after work and take a shower if necessary.
When using do not eat, drink, smoke, sniff.
Use protective skin cream before handling the product.
Make available sufficient washing facilities
Provide eye shower and label its location conspicuously

**Further information on handling**

Obtain, read and follow all safety instructions before use.
Obtain special instructions before use.
Persons with a history of skin sensitisation problems should not be employed in any process in which this product is used.

### 7.2. Conditions for safe storage, including any incompatibilities

**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place.
Keep/Store only in original container.

Protect against heat and direct sunlight.
Keep container carefully closed and upright to prevent any leakage.
Floors should be impervious, resistant to liquids and easy to clean.
Restrict general access to the store.
Provide for retaining containers, e.g. floor pan without outflow.

**Hints on joint storage**

Keep away from food, drink and animal feedingstuffs.
Keep away from: Incompatible materials

**Further information on storage conditions**

Keep away from:
Heat
Humidity
Frost

### 7.3. Specific end use(s)

Industrial uses

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Exposure limits (EH40)**

| CAS No | Substance | ppm | mg/m³ | fibres/ml | Category | Origin |
|---|---|---|---|---|---|---|
| 128-37-0 | 2,6-Di-tert-butyl-p-cresol | - | 10 | | TWA (8 h) | WEL |
| 13463-67-7 | Titanium dioxide, respirable | - | 4 | | TWA (8 h) | WEL |

**DNEL/DMEL values**

| CAS No | Substance | | | |
|---|---|---|---|---|
| DNEL type | | Exposure route | Effect | Value |
| 13463-67-7 | titanium dioxide | | | |
| Worker DNEL, long-term | | inhalation | local | 1,25 mg/m³ |
| Consumer DNEL, long-term | | oral | systemic | 700 mg/kg bw/day |
| 64194-22-5 | 3-methyl-1,5-pentanediyl diacrylate | | | |
| Worker DNEL, long-term | | inhalation | systemic | 14,81 mg/m³ |
| Worker DNEL, long-term | | dermal | systemic | 42 mg/kg bw/day |
| Consumer DNEL, long-term | | inhalation | systemic | 2,6 mg/m³ |
| Consumer DNEL, long-term | | dermal | systemic | 15 mg/kg bw/day |
| Consumer DNEL, long-term | | oral | systemic | 1,5 mg/kg bw/day |
| 15625-89-5 | 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate | | | |
| Worker DNEL, long-term | | inhalation | systemic | 17,1 mg/m³ |
| Worker DNEL, long-term | | dermal | systemic | 404 mg/kg bw/day |
| Consumer DNEL, long-term | | inhalation | systemic | 0,87 mg/m³ |
| Consumer DNEL, long-term | | dermal | systemic | 42 mg/kg bw/day |
| Consumer DNEL, long-term | | oral | systemic | 0,5 mg/kg bw/day |
| , | | | | |
| 84434-11-7 | Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate | | | |
| Consumer DNEL, long-term | | inhalation | systemic | 0,87 mg/m³ |
| Consumer DNEL, long-term | | dermal | systemic | 0,5 mg/kg bw/day |
| Consumer DNEL, long-term | | oral | systemic | 0,5 mg/kg bw/day |
| Worker DNEL, long-term | | inhalation | systemic | 4,93 mg/m³ |
| Worker DNEL, long-term | | dermal | systemic | 1,4 mg/kg bw/day |
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | | | |
| Consumer DNEL, long-term | | inhalation | systemic | 0,145 mg/m³ |
| Consumer DNEL, long-term | | oral | systemic | 0,0833 mg/kg bw/day |
| Consumer DNEL, long-term | | dermal | systemic | 0,0833 mg/kg bw/day |
| Worker DNEL, long-term | | inhalation | systemic | 0,822 mg/m³ |
| Worker DNEL, long-term | | dermal | systemic | 0,233 mg/kg bw/day |
| 57472-68-1 | Oxybis(methyl-2,1-ethanediyl) diacrylate | | | |
| Worker DNEL, long-term | | inhalation | systemic | 2,35 mg/m³ |
| Worker DNEL, long-term | | dermal | systemic | 1,7 mg/kg bw/day |
| Consumer DNEL, long-term | | inhalation | systemic | 7,24 mg/m³ |
| Consumer DNEL, long-term | | dermal | systemic | 1,66 mg/kg bw/day |
| Consumer DNEL, long-term | | oral | systemic | 2,08 mg/kg bw/day |
| 77-99-6 | Propylidynetrimethanol | | | |
| Worker DNEL, long-term | | inhalation | systemic | 3,3 mg/m³ |

| | | | |
|---|---|---|---|
| Worker DNEL, long-term | dermal | systemic | 0,94 mg/kg bw/day |
| Consumer DNEL, long-term | inhalation | systemic | 0,58 mg/m³ |
| Consumer DNEL, long-term | dermal | systemic | 0,34 mg/kg bw/day |
| Consumer DNEL, long-term | oral | systemic | 0,34 mg/kg bw/day |
| 128-37-0 | 2,6-di-tert-butyl-p-cresol | | |
| Consumer DNEL, long-term | oral | systemic | 0,25 mg/kg bw/day |
| Worker DNEL, long-term | inhalation | systemic | 1,76 mg/m³ |
| Worker DNEL, long-term | dermal | systemic | 0,5 mg/kg bw/day |
| Consumer DNEL, long-term | inhalation | systemic | 0,435 mg/m³ |
| Consumer DNEL, long-term | dermal | systemic | 0,25 mg/kg bw/day |
| , | | | |

**PNEC values**

| CAS No | Substance |
|---|---|
| Environmental compartment | Value |
| 13463-67-7 | titanium dioxide |
| Freshwater | 0,184 mg/l |
| Freshwater (intermittent releases) | 0,193 mg/l |
| Marine water | 0,018 mg/l |
| Freshwater sediment | 1000 mg/kg |
| Marine sediment | 100 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | 100 mg/l |
| Soil | 100 mg/kg |
| 64194-22-5 | 3-methyl-1,5-pentanediyl diacrylate |
| Freshwater | 0,005 mg/l |
| Freshwater (intermittent releases) | 0,012 mg/l |
| Marine water | 0,001 mg/l |
| Freshwater sediment | 0,138 mg/kg |
| Marine sediment | 0,014 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | 10 mg/l |
| 15625-89-5 | 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate |
| Freshwater | 0,00087 mg/l |
| Freshwater (intermittent releases) | 0,0087 mg/l |
| Marine water | 0,000087 mg/l |
| Freshwater sediment | 0,017 mg/kg |
| Marine sediment | 0,002 mg/kg |
| Secondary poisoning | 10 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | 6,25 mg/l |
| Soil | 0,003 mg/kg |
| 84434-11-7 | Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate |
| Freshwater | 0,00101 mg/l |
| Freshwater (intermittent releases) | 0,0101 mg/l |
| Marine water | 0,000101 mg/l |
| Freshwater sediment | 0,24 mg/kg |
| Marine sediment | 0,024 mg/kg |
| Soil | 0,0475 mg/kg |
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide |
| Freshwater | 0,0014 mg/l |
| Freshwater (intermittent releases) | 0,014 mg/l |
| Marine water | 0,00014 mg/l |
| Freshwater sediment | 0,115 mg/kg |
| Marine sediment | 0,0115 mg/kg |
| Soil | 0,0222 mg/kg |
| 57472-68-1 | Oxybis(methyl-2,1-ethanediyl) diacrylate |
| Freshwater | 0,003 mg/l |

| | |
|---|---|
| Freshwater (intermittent releases) | 0,034 mg/l |
| Marine water | 0 mg/l |
| Freshwater sediment | 0,019 mg/kg |
| Marine sediment | 0,002 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | 100 mg/l |
| Soil | 0,002 mg/kg |
| 128-37-0 | 2,6-di-tert-butyl-p-cresol |
| Freshwater | 0,000199 mg/l |
| Freshwater (intermittent releases) | 0,00199 mg/l |
| Marine water | 0,00002 mg/l |
| Freshwater sediment | 0,458 mg/kg |
| Marine sediment | 0,046 mg/kg |
| Secondary poisoning | 16,67 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | 0,017 mg/l |
| Soil | 0,054 mg/kg |

**Additional advice on limit values**

Observe in addition any national regulations!

## 8.2. Exposure controls

**Appropriate engineering controls**

Technical ventilation of workplace - Room air monitoring
Devices with local exhaust
Minimum room ventilation rate for handling/application (air changes per hour): >=10

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

**Eye/face protection**

Suitable eye protection: Tightly sealed safety glasses. EN 166

**Hand protection**

Tested protective gloves must be worn: EN ISO 374
The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Unsuitable material:Fabric, Leather articles

Suitable material: Butyl caoutchouc (butyl rubber)
Wearing time with permanent contact
Thickness of the glove material: >0,7 mm
Permeation time (maximum wear duration): >480 min

Suitable material: NBR (Nitrile rubber)
Wearing time with occasional contact (splashes):
Thickness of the glove material: >0,35 mm
Permeation time (maximum wear duration): >60 min

Breakthrough times and swelling properties of the material must be taken into consideration.
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
Wear cotton undermitten if possible.
Check leak tightness/impermeability prior to use.

**Skin protection**

Suitable protective clothing: Protective clothing DIN 13688
When handling with chemical substances, protective clothing with CE-labels including the four control digits

must be worn.

**Respiratory protection**

Usually no personal respirative protection necessary.
Respiratory protection necessary at: exceeding exposure limit values, aerosol or mist formation
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.
Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

**Thermal hazards**

No information available.

**Environmental exposure controls**

Provide for retaining containers, e.g. floor pan without outflow.

## SECTION 9: Physical and chemical properties

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

| | | |
|---|---|---|
| Physical state: | liquid | |
| Colour: | white | |
| Odour: | Acrylate | |
| Melting point/freezing point: | | <32 °F/ <0 °C |
| Boiling point or initial boiling point and boiling range: | | >212 °F/ >100 °C |
| Flammability: | | Non-flammable. |
| Lower explosion limits: | | No data available |
| Upper explosion limits: | | No data available |
| Flash point: | | >212 °F/ >100 °C |
| Auto-ignition temperature: | | 703 °F / 373 °C |
| Decomposition temperature: | | No data available |
| pH-Value: | | practically insoluble |
| Viscosity / kinematic: (at 45 °C) | | 4,25-5,10 mm²/s |
| Water solubility: | | practically insoluble |

Solubility in other solvents

No information available.

| | |
|---|---|
| Partition coefficient n-octanol/water: | 1,13 |
| Vapour pressure: (at 25 °C) | 0,04 hPa |
| Density: | No data available |
| Relative density (at 20 °C): | 1,176 |
| Relative vapour density: | No data available |

### 9.2. Other information

**Information with regard to physical hazard classes**

Explosive properties

No information available.

| | |
|---|---|
| Sustaining combustion: | No data available |

Self-ignition temperature

| | |
|---|---|
| Solid: | No data available |
| Gas: | 347 °F/ >=175 °C |

Oxidizing properties

No information available.

**Other safety characteristics**

| | |
|---|---|
| Evaporation rate: | No data available |
| Solid content: | No data available |

| | |
|---|---|
| Sublimation point: | No data available |
| Softening point: | No data available |
| Pour point: | No data available |
| Viscosity / dynamic: (at 45 °C) | 5-6 mPa·s |

**Further Information**

No information available.

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

This material is considered to be non-reactive under normal use conditions.

**10.2. Chemical stability**

The product is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

No data available

**10.4. Conditions to avoid**

extreme temperatures
contamination

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

Reference to other sections: 5

**Further information**

No data available

## SECTION 11: Toxicological information

**11.1. Information on hazard classes as defined in GB CLP Regulation**

**Toxicocinetics, metabolism and distribution**

The product has not been tested.

**Acute toxicity**

Based on available data, the classification criteria are not met.

**ATEmix calculated**

ATE (oral) > 5000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 50 mg/l; ATE (inhalation dust/mist) > 5 mg/l

| CAS No | Chemical name | | | | | |
|---|---|---|---|---|---|---|
| | Exposure route | Dose | | Species | Source | Method |
| 86273-46-3 | 2-(2-Vinyloxyethoxy)ethyl acrylate | | | | | |
| | oral | LD50 mg/kg | 1790 | Rat | | |
| | dermal | LD50 mg/kg | >2000 | Rat | | |
| 13463-67-7 | titanium dioxide | | | | | |
| | oral | LD50 mg/kg | > 2000 | Rat | Study report (1996) | OECD Guideline 401 |
| | dermal | LD50 mg/kg | >10000 | Rabbit | | |
| | inhalation (4 h) dust/mist | LC50 mg/l | >6,82 | Rat | | |
| 64194-22-5 | 3-methyl-1,5-pentanediyl diacrylate | | | | | |
| | inhalation vapour | ATE | 11 mg/l | | | |
| | inhalation dust/mist | ATE | 1,5 mg/l | | | |
| 15625-89-5 | 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate | | | | | |
| | oral | LD50 mg/kg | > 3000 | Rat | Study report (1972) | An acute oral toxicity study was perform |
| | dermal | LD50 mg/kg | >6000 | Rabbit | Other company data (1981) | |
| 84434-11-7 | Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate | | | | | |
| | oral | LD50 mg/kg | > 5000 | Rat | Study report (1982) | OECD Guideline 401 |
| | dermal | LD50 mg/kg | >= 2000 | Rat | Study report (2013) | OECD Guideline 402 |
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | | | | | |
| | oral | LD50 mg/kg | > 5000 | Rat | Study report (1989) | OECD Guideline 401 |
| | dermal | LD50 mg/kg | > 2000 | Rat | Study report (2011) | OECD Guideline 402 |
| 57472-68-1 | Oxybis(methyl-2,1-ethanediyl) diacrylate | | | | | |
| | oral | LD50 mg/kg | 3530 | Rat | Study report (1987) | OECD Guideline 401 |
| | dermal | LD50 mg/kg | > 2000 | Rabbit | Publication (1984) | OECD Guideline 402 |
| 77-99-6 | Propylidynetrimethanol | | | | | |
| | oral | LD50 mg/kg | ca. 14700 | Rat | Study report (1956) | Method: groups of 5 male rats were given |
| | dermal | LD50 mg/kg | > 10000 | Rabbit | Study report (1956) | Groups of 4 albino rabbits were evaluate |
| 128-37-0 | 2,6-di-tert-butyl-p-cresol | | | | | |
| | oral | LD50 mg/kg | > 6000 | Rat | Study report (1989) | OECD Guideline 401 |
| | dermal | LD50 mg/kg | > 2000 | Rat | Study report (1988) | OECD Guideline 402 |

**Irritation and corrosivity**

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Causes serious eye irritation.

**Sensitising effects**

May cause an allergic skin reaction. (2-(2-Vinyloxyethoxy)ethyl acrylate; 3-methyl-1,5-pentanediyl diacrylate; 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate; Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate; diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide; 2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol; Oxybis(methyl-2,1-ethanediyl) diacrylate)

**Carcinogenic/mutagenic/toxic effects for reproduction**

Suspected of causing cancer. (titanium dioxide; 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate)
May damage fertility. Suspected of damaging the unborn child. (diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide)
Germ cell mutagenicity: Based on available data, the classification criteria are not met.

**STOT-single exposure**

May cause respiratory irritation.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Practical experience**

oral: Ingestion may cause irritation and nausea.
Dermal: Causes moderate skin irritation with prolonged exposure.
inhalation: Inhalation is the main route of exposure. In high concentrations, vapours, mist or fumes may cause irritation of the mucous membranes of the nose, throat and mouth.

### 11.2. Information on other hazards

**Endocrine disrupting properties**

Endocrine disrupting properties: 2,6-di-tert-butyl-p-cresol.

**Further information**

No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

Toxic to aquatic life with long lasting effects.

| CAS No | Chemical name | | | | | | |
|---|---|---|---|---|---|---|---|
| | Aquatic toxicity | Dose | | [h] \| [d] | Species | Source | Method |
| 86273-46-3 | 2-(2-Vinyloxyethoxy)ethyl acrylate | | | | | | |
| | Acute fish toxicity | LC50 | 6,8 mg/l | 96 h | Danio rerio (zebrafish) | | |
| | Acute algae toxicity | ErC50 | 10 mg/l | 72 h | Scenedesmus subspicatus | | |
| | Acute crustacea toxicity | EC50 | 55 mg/l | 48 h | Daphnia magna (Big water flea) | | |
| | Fish toxicity | NOEC | 2,2 mg/l | 4 d | | | |
| | Algae toxicity | NOEC | 0,78 mg/l | 3 d | | | |
| | Crustacea toxicity | NOEC | 25 mg/l | 2 d | | | |
| 13463-67-7 | titanium dioxide | | | | | | |
| | Acute fish toxicity | LC50 | > 100 mg/l | 96 h | Carassius auratus | REACh Registration Dossier | OECD Guideline 203 |
| | Acute algae toxicity | ErC50 | > 50 mg/l | 72 h | Raphidocelis subcapitata | REACh Registration Dossier | OECD Guideline 201 |
| | Acute crustacea toxicity | EC50 | > 100 mg/l | 48 h | Artemia salina | REACh Registration Dossier | OECD Guideline 202 |
| | Fish toxicity | NOEC | >= 80 mg/l | 6 d | Danio rerio | REACh Registration Dossier | OECD TG 210 |
| | Algae toxicity | NOEC | >= 1 mg/l | 32 d | Synedra ulna, Scenedesmus quadricauda, Stigeocloni | Environ. Tox. Chem. 31, 2414-2422 (2012) | In this study, the authors report the re |
| | Crustacea toxicity | NOEC | > 1 mg/l | 10 d | Chironomus riparius | REACh Registration Dossier | other: OECD Guideline 219 |
| | Acute bacteria toxicity | EC50 | > 1000 mg/l ( ) | 3 h | activated sludge, domestic | REACh Registration Dossier | OECD Guideline 209 |
| 64194-22-5 | 3-methyl-1,5-pentanediyl diacrylate | | | | | | |
| | Acute fish toxicity | LC50 | 1,234 mg/l | 96 h | Danio rerio | Study report (2014) | OECD Guideline 203 |
| | Acute algae toxicity | ErC50 | 0,46 mg/l | 72 h | Raphidocelis subcapitata | Study report (2014) | OECD Guideline 201 |
| | Acute crustacea toxicity | EC50 | 12,79 mg/l | 48 h | Daphnia magna | Study report (2018) | OECD Guideline 202 |
| | Crustacea toxicity | NOEC | 0,271 mg/l | 21 d | Daphnia magna | Study report (2018) | OECD Guideline 211 |
| 15625-89-5 | 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate | | | | | | |
| | Acute fish toxicity | LC50 | 0,87 mg/l | 96 h | Danio rerio | Study report (2016) | OECD Guideline 203 |
| | Acute algae toxicity | ErC50 | 4,86 mg/l | 96 h | Desmodesmus subspicatus | Study report (1989) | EU Method C.3 |
| | Acute crustacea toxicity | EC50 | 19,9 mg/l | 48 h | Daphnia magna | Study report (1991) | EU Method C.2 |
| 84434-11-7 | Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Acute fish toxicity | LC50 1,89 mg/l | 96 h | Danio rerio | REACh Registration Dossier | OECD Guideline 203 |
| | Acute algae toxicity | ErC50 0,239 mg/l | 72 h | Desmodesmus subspicatus | REACh Registration Dossier | OECD Guideline 201 |
| | Acute crustacea toxicity | EC50 2,26 mg/l | 48 h | Daphnia magna | REACh Registration Dossier | OECD Guideline 202 |
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | | | | | |
| | Acute fish toxicity | LC50 1,4 mg/l | 96 h | Cyprinus carpio | REACh Registration Dossier | OECD Guideline 203 |
| | Acute algae toxicity | ErC50 > 2,01 mg/l | 72 h | Raphidocelis subcapitata | REACh Registration Dossier | OECD Guideline 201 |
| | Acute crustacea toxicity | EC50 3,53 mg/l | 48 h | Daphnia magna | REACh Registration Dossier | OECD Guideline 202 |
| 57472-68-1 | Oxybis(methyl-2,1-ethanediyl) diacrylate | | | | | |
| | Acute fish toxicity | LC50 2,15 - 4,64 mg/l | 96 h | Leuciscus idus | Study report (1989) | other: German industrial standard test g |
| | Acute algae toxicity | ErC50 16,7 mg/l | 72 h | Desmodesmus subspicatus | Study report (1990) | other: DIN 38412, part 9 |
| | Acute crustacea toxicity | EC50 22,3 mg/l | 48 h | Daphnia magna | Study report (1988) | EU Method C.2 |
| | Acute bacteria toxicity | EC50 > 1000 mg/l ( ) | 0,5 h | activated sludge, domestic | Study report (2002) | OECD Guideline 209 |
| 77-99-6 | Propylidynetrimethanol | | | | | |
| | Acute fish toxicity | LC50 > 1000 mg/l | 96 h | Alburnus alburnus | Marine Pollution Bulletin, 14, 213-214 ( | A static acute toxicity test was perform |
| | Acute algae toxicity | ErC50 > 1000 mg/l | 72 h | Raphidocelis subcapitata | Citation of an unavailable study report | other: OECD Guideline, not further speci |
| | Acute crustacea toxicity | EC50 105 mg/l | 48 h | Daphnia magna (Big water flea) | | |
| | Crustacea toxicity | NOEC > 1000 mg/l | 21 d | Daphnia magna | Citation of an unavailable study report | other: OECD guideline, not further speci |
| | Acute bacteria toxicity | EC50 > 1000 mg/l ( ) | 3 h | activated sludge of a predominantly domestic sewag | Study report (2010) | EU Method C.11 |
| 128-37-0 | 2,6-di-tert-butyl-p-cresol | | | | | |
| | Acute fish toxicity | LC50 0,199 mg/l | 96 h | Oryzias latipes | REACh Registration Dossier | OECD Guideline 203 |
| | Acute algae toxicity | ErC50 0,758 mg/l | 96 h | Raphidocelis subcapitata | REACh Registration Dossier | OECD Guideline 201 |
| | Acute crustacea toxicity | EC50 0,48 mg/l | 48 h | Daphnia magna | REACh Registration Dossier | OECD Guideline 202 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Fish toxicity | NOEC mg/l | 0,053 | 30 d | Oryzias latipes | REACh Registration Dossier | OECD Guideline 210 |
| | Crustacea toxicity | NOEC mg/l | 0,069 | 21 d | Daphnia magna | REACh Registration Dossier | OECD Guideline 211 |
| | Acute bacteria toxicity | EC50 mg/l ( ) | > 10000 | 3 h | Activated sludge | Study report (2000) | OECD Guideline 209 |

**12.2. Persistence and degradability**

No further relevant information available.

| CAS No | Chemical name | | | |
|---|---|---|---|---|
| | Method | Value | d | Source |
| | Evaluation | | | |
| 86273-46-3 | 2-(2-Vinyloxyethoxy)ethyl acrylate | | | |
| | | >84,4% | 28 | |
| 15625-89-5 | 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate | | | |
| | OECD 301 B | >60% | 28 | |
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | | | |
| | OECD 301F | 0-10% | 28 | |
| | Not readily biodegradable (according to OECD criteria) | | | |
| 57472-68-1 | Oxybis(methyl-2,1-ethanediyl) diacrylate | | | |
| | OECD 301 E | 100% | 28 | |

**12.3. Bioaccumulative potential**

No further relevant information available.

**Partition coefficient n-octanol/water**

| CAS No | Chemical name | Log Pow |
|---|---|---|
| 64194-22-5 | 3-methyl-1,5-pentanediyl diacrylate | 2,76 |
| 15625-89-5 | 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate | 4,35 |
| 84434-11-7 | Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate | 2,91 |
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | 3,1 |
| 57472-68-1 | Oxybis(methyl-2,1-ethanediyl) diacrylate | 0,01 - 0,39 |
| 77-99-6 | Propylidynetrimethanol | -0,47 |
| 128-37-0 | 2,6-di-tert-butyl-p-cresol | 5,03 |

**BCF**

| CAS No | Chemical name | BCF | Species | Source |
|---|---|---|---|---|
| 13463-67-7 | titanium dioxide | > 0,47 - < 3,19 | Artemia salina | REACh Registration D |
| 15625-89-5 | 2-ethyl-2-[[(1-oxoallyl)oxy]methyl] -1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate | 123 | | REACh Registration D |
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | 47 - 55 | Cyprinus carpio | REACh Registration D |
| 77-99-6 | Propylidynetrimethanol | < 1 | Cyprinus carpio | Citation of an unava |
| 128-37-0 | 2,6-di-tert-butyl-p-cresol | 465 | fish | REACh Registration D |

**12.4. Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No information available.

**Further information**

Germany: water hazard class 3

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

**Disposal recommendations**

Dispose of waste according to applicable legislation.
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
Hazardous waste according to Directive 2008/98/EC (waste framework directive).

**List of Wastes Code - residues/unused products**

080312 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of printing inks; waste ink containing hazardous substances; hazardous waste

**List of Wastes Code - contaminated packaging**

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

**Contaminated packaging**

Dispose of waste according to applicable legislation.
Completely emptied packages can be recycled.

Don't store containers without labelling.

## SECTION 14: Transport information

**Land transport (ADR/RID)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 3082 |
| **14.2. UN proper shipping name:** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate) |
| **14.3. Transport hazard class(es):** | 9 |
| **14.4. Packing group:** | III |
| Hazard label: | 9 |
| Classification code: | M6 |
| Special Provisions: | 274 335 375 601 |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |
| Transport category: | 3 |
| Hazard No: | 90 |
| Tunnel restriction code: | - |

**Inland waterways transport (ADN)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 3082 |

| | |
|---|---|
| **14.2. UN proper shipping name:** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate) |
| **14.3. Transport hazard class(es):** | 9 |
| **14.4. Packing group:** | III |
| Hazard label: | 9 |
| Classification code: | M6 |
| Special Provisions: | 274 335 375 601 |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |

**Marine transport (IMDG)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 3082 |
| **14.2. UN proper shipping name:** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate) |
| **14.3. Transport hazard class(es):** | 9 |
| **14.4. Packing group:** | III |
| Hazard label: | 9 |
| Marine pollutant: | p |
| Special Provisions: | 274 335 969 |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |
| EmS: | F-A, S-F |

**Air transport (ICAO-TI/IATA-DGR)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 3082 |
| **14.2. UN proper shipping name:** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate) |
| **14.3. Transport hazard class(es):** | 9 |
| **14.4. Packing group:** | III |
| Hazard label: | 9 |
| Special Provisions: | A97 A158 A197 A215 |
| Limited quantity Passenger: | 30 kg G |
| Passenger LQ: | Y964 |
| Excepted quantity: | E1 |
| IATA-packing instructions - Passenger: | 964 |
| IATA-max. quantity - Passenger: | 450 L |
| IATA-packing instructions - Cargo: | 964 |
| IATA-max. quantity - Cargo: | 450 L |

**14.5. Environmental hazards**

| | |
|---|---|
| ENVIRONMENTALLY HAZARDOUS: | Yes |
| Danger releasing substance: | 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate |

**14.6. Special precautions for user**

No information available.

**14.7. Maritime transport in bulk according to IMO instruments**

No information available.

**Other applicable information**

No information available.

Hazchem code: •3Z

## SECTION 15: Regulatory information

## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**EU regulatory information**

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Information according to Directive 2012/18/EU (SEVESO III): E2 Hazardous to the Aquatic Environment

**Additional information**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
Classification according to Regulation (EC) No 1272/2008 [CLP]
COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
DIRECTIVE (EU) 2018/851 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCILof 30 May 2018amending Directive 2008/98/EC on waste
DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives
Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work
Council Directive 92/85/EEC of 19 October 1992 on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding (tenth individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC)
REGULATION (EC) No 166/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC

**National regulatory information**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 3 - highly hazardous to water

**Additional information**

Germany:
Ordinance on systems for handling water-polluting substances (AwSV)
Hazardous Substances Ordinance (GefStoffV)
Dangerous Goods Officer Ordinance (GbV)
Dangerous Goods Ordinance for Road, Rail and Inland Navigation (GGVSEB)

TRGS 201, TRGS 220, TRGS 400ff., TRGS 500, TRGS 509, TRGS 510, TRGS 555, TRGS 900

## 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
2-(2-Vinyloxyethoxy)ethyl acrylate
titanium dioxide
2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide
Oxybis(methyl-2,1-ethanediyl) diacrylate
Propylidynetrimethanol
2,6-di-tert-butyl-p-cresol

## SECTION 16: Other information

**Abbreviations and acronyms**

Acute Tox: Acute toxicity
Skin Irrit: Skin irritation
Eye Dam: Eye damage
Eye Irrit: Eye irritation
Skin Sens: Skin sensitisation
Carc: Carcinogenicity
Repr: Reproductive toxicity
STOT SE: Specific target organ toxicity - single exposure
Aquatic Acute: Acute aquatic hazard
Aquatic Chronic: Chronic aquatic hazard
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID:Règlement international conernat le transport des marchandises dangereuses par chemin de fer
(Regulations Concerning the International Transport of Dangerous Goods by Rail)
ATE mix: Acute toxicity estimate of the mixture
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Refulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
CAS: Chemical Abstracts Service (division of the American Chemical Society)
CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures
CMR: carcinogenicity, mutagenicity and toxicity for reproduction
EC50: Effectice concentration, 50 percent
DNEL: Derived No Effect Level
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOEL: No Observed Effect Level
PNEC: Predicted No Effect Concentration
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
VOC: Volatile Organic Compound
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

**Classification for mixtures and used evaluation method according to GB CLP Regulation**

| Classification | Classification procedure |
|---|---|
| Skin Irrit. 2; H315 | Calculation method |
| Eye Irrit. 2; H319 | Calculation method |
| Skin Sens. 1; H317 | Calculation method |
| Carc. 2; H351 | Calculation method |
| Repr. 1B; H360Fd | Calculation method |
| STOT SE 3; H335 | Calculation method |
| Aquatic Chronic 2; H411 | Calculation method |

**Relevant H and EUH statements (number and full text)**

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |

| | |
|---|---|
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer. |
| H360Fd | May damage fertility. Suspected of damaging the unborn child. |
| H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| 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. |
| EUH211 | Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. |

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*