

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## ROTOSTAR UV 166 014 SILVER FLEXO INK

|         |                |              |                                 |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number:  | Print Date: 05.12.2023          |
| 8.1     | 04.12.2023     | 102000028180 | Date of first issue: 04.09.2017 |

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

#### 1.1 Product identifier

Trade name : ROTOSTAR UV 166 014 SILVER FLEXO INK

Product code : 023411U20M1

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

Use of the Substance/Mixture : Colorant; Printing ink related material; Printing ink, Colouring agents, dyes

#### 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](mailto:msds.eckart@altana.com)

#### 1.4 Emergency telephone number

NCEC: +44 1235 239670 (Europe)  
Call and response in your language is possible.  
Contract no.: ECKART29003-NCEC.

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

|  |  |
|--|--|
| Eye irritation, Category 2                     | H319: Causes serious eye irritation.                   |
| Skin sensitisation, Category 1                 | H317: May cause an allergic skin reaction.             |
| Reproductive toxicity, Category 2              | H361d: Suspected of damaging the unborn child.         |
| Long-term (chronic) aquatic hazard, Category 2 | H411: Toxic to aquatic life with long lasting effects. |

#### 2.2 Label elements

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




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|                          |   |   |
|--------------------------|---|---|
| Hazard pictograms        | : |     |
| Signal word              | : | Warning   |
| Hazard statements        | : | H317      May cause an allergic skin reaction.<br>H319      Causes serious eye irritation.<br>H361d      Suspected of damaging the unborn child.<br>H411      Toxic to aquatic life with long lasting effects.  |
| Precautionary statements | : | <b>Prevention:</b><br>P201      Obtain special instructions before use.<br>P261      Avoid breathing mist or vapours.<br>P273      Avoid release to the environment.<br>P280      Wear protective gloves/ protective clothing/<br>eye protection/ face protection/ hearing<br>protection.<br><b>Response:</b><br>P308 + P313      IF exposed or concerned: Get medical<br>advice/ attention.<br>P391      Collect spillage. |

### Hazardous components which must be listed on the label:

Propylidynetrimethanol, ethoxylated, esters with acrylic acid  
Bisphenol A epoxy acrylate  
ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate  
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate  
2-Propenoic acid, ester with C12-16-alkyl glycidyl ether  
Glycerol, propoxylated, esters with acrylic acid

### 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.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Components

| Chemical name   | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number | ClassificationREGUL<br>ATION (EC) No<br>1272/2008 | Concentration<br>(% w/w) |
|---|---|---|--------------------------|
| Propylidynetrimethanol,<br>ethoxylated, esters with acrylic<br>acid | 28961-43-5<br>500-066-5<br><br>01-2119489900-30       | Eye Irrit. 2; H319<br>Skin Sens. 1; H317          | >= 50 - <= 100           |
| Bisphenol A epoxy acrylate  | 55818-57-0  | Skin Sens. 1; H317                                | >= 10 - < 20             |

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|  |  |  |                   |
|--|--|--|-------------------|
|  | 500-130-2<br>01-2119490020-53                              | Aquatic Chronic 2;<br>H411   |                   |
| ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate          | 84434-11-7<br>282-810-6                                    | Skin Sens. 1; H317<br>Aquatic Chronic 2;<br>H411   | $\geq 10 - < 20$  |
| aluminium powder (stabilised)                            | 7429-90-5<br>231-072-3<br>013-002-00-1<br>01-2119529243-45 | Flam. Sol. 1; H228   | $\geq 1 - < 10$   |
| 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate       | 6846-50-0<br>229-934-9<br>01-2119451093-47                 | Repr. 2; H361d<br>Aquatic Chronic 3;<br>H412   | $\geq 3 - < 10$   |
| 2-Propenoic acid, ester with C12-16-alkyl glycidyl ether | 68071-40-9   | Skin Sens. 1A; H317  | $\geq 1 - < 10$   |
| Glycerol, propoxylated, esters with acrylic acid         | 52408-84-1<br>500-114-5                                    | Eye Irrit. 2; H319<br>Skin Sens. 1; H317   | $\geq 1 - < 10$   |
| 2,6-di-tert-butyl-p-cresol                               | 128-37-0<br>204-881-4                                      | Aquatic Acute 1;<br>H400<br>Aquatic Chronic 1;<br>H410<br><hr/> M-Factor (Acute aquatic toxicity): 1<br>M-Factor (Chronic aquatic toxicity): 1 | $\geq 0.25 - < 1$ |

For explanation of abbreviations see section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General advice : Move the victim to fresh air.

Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.

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

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- |                         |   |   |
|-------------------------|---|---|
| In case of skin contact | : | Wash off immediately with soap and plenty of water.   |
| In case of eye contact  | : | Immediately flush eye(s) with plenty of water.<br>Immediately flush eye(s) with plenty of water.<br>Remove contact lenses.<br>Keep eye wide open while rinsing.<br>If eye irritation persists, consult a specialist.  |
| If swallowed            | : | Keep respiratory tract clear.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.<br>Take victim immediately to hospital. |

### 4.2 Most important symptoms and effects, both acute and delayed

- |       |   |   |
|-------|---|---|
| Risks | : | May cause an allergic skin reaction.<br>Causes serious eye irritation.<br>Suspected of damaging the unborn child. |
|-------|---|---|

### 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   | : | Dry sand<br>ABC powder<br>Foam  |
| Unsuitable extinguishing media | : | High volume water jet<br>Carbon dioxide (CO <sub>2</sub> )<br><br>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.<br>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.<br>Use extinguishing measures that are appropriate to local |

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circumstances and the surrounding environment.

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### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.  
Use personal protective equipment.

#### 6.2 Environmental precautions

General advice : The product should not be allowed to enter drains, water courses or the soil.  
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 : Use mechanical handling equipment.  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

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

For personal protection see section 8.

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### 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.

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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 : Earthing of containers and apparatuses is essential. Reaction with water liberates extremely flammable gas (hydrogen) Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition - No smoking. Keep container closed when not in use.

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. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : Protect from humidity and water.

Advice on common storage : Do not store near acids.  
Do not store together with oxidizing and self-igniting products. Never allow product to get in contact with water during storage.  
Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Further information on storage stability : No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

| Components   | CAS-No.   | Value type (Form of exposure) | Control parameters   | Basis   |
|--|-----------|-------------------------------|----------------------|---------|
| aluminium powder (stabilised)  | 7429-90-5 | TWA (Inhalable)               | 10 mg/m <sup>3</sup> | GB EH40 |
|  |           | TWA (Respirable fraction)     | 4 mg/m <sup>3</sup>  | GB EH40 |
|  |           | TWA (inhalable dust)          | 10 mg/m <sup>3</sup> | GB EH40 |
| 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 MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols., The COSHH definition of a |           |                               |                      |         |

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|                            |   |                       |                      |         |
|----------------------------|---|-----------------------|----------------------|---------|
|                            | <p>substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m<sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m<sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., 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 MDHS14/4., 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 limit should be used.</p>  |                       |                      |         |
|                            |   | TWA (Respirable dust) | 4 mg/m <sup>3</sup>  | GB EH40 |
|                            | <p>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 MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols., 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<sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m<sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., 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 MDHS14/4., 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 limit should be used.</p> |                       |                      |         |
| 2,6-di-tert-butyl-p-cresol | 128-37-0  | TWA                   | 10 mg/m <sup>3</sup> | GB EH40 |
|                            | <p>Further information: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.</p>  |                       |                      |         |

### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

| Substance name       | End Use | Exposure routes | Potential health effects | Value                  |
|----------------------|---------|-----------------|--------------------------|------------------------|
| Propylidynetrimethan | Workers | Inhalation      | Long-term systemic       | 16.2 mg/m <sup>3</sup> |



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|--|-----------|--------------|----------------------------|-------------|
| ol, ethoxylated, esters with acrylic acid          |           |              | effects                    |             |
|  | Workers   | Skin contact | Long-term systemic effects | 0.8 mg/kg   |
|  | Consumers | Inhalation   | Long-term systemic effects | 4.9 mg/m3   |
|  | Consumers | Skin contact | Long-term systemic effects | 0.48 mg/kg  |
|  | Consumers | Oral         | Long-term systemic effects | 1.39 mg/kg  |
| Bisphenol A epoxy acrylate                         | Workers   | Inhalation   | Long-term systemic effects | 1.17 mg/m3  |
|  | Workers   | Dermal       | Long-term systemic effects | 33 mg/kg    |
|  | Consumers | Inhalation   | Long-term systemic effects | 0.29 mg/m3  |
|  | Consumers | Dermal       | Long-term systemic effects | 16.67 mg/kg |
|  | Consumers | Oral         | Long-term systemic effects | 0.17 mg/kg  |
| ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate    | Workers   | Skin contact | Long-term systemic effects | 1.7 mg/kg   |
|  | Workers   | Inhalation   | Long-term systemic effects | 5.88 mg/m3  |
| aluminium powder (stabilised)                      | Workers   | Inhalation   | Long-term systemic effects | 3.72 mg/m3  |
|  | Workers   | Inhalation   | Long-term local effects    | 3.72 mg/m3  |
|  | Consumers | Oral         | Long-term systemic effects | 3.95 mg/kg  |
| 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate | Workers   | Skin contact | Long-term systemic effects | 5.00 mg/kg  |
|  | Workers   | Inhalation   | Long-term systemic effects | 17.62 mg/m3 |
|  | Consumers | Ingestion    | Long-term systemic effects | 5.00 mg/kg  |
|  | Consumers | Skin contact | Long-term systemic effects | 5.00 mg/kg  |
|  | Consumers | Inhalation   | Long-term systemic effects | 4.35 mg/m3  |
| Glycerol, propoxylated, esters with acrylic acid   | Workers   | Inhalation   | Long-term systemic effects | 16.22 mg/m3 |
|  | Workers   | Dermal       | Long-term systemic effects | 1.92 mg/kg  |
|  | Consumers | Inhalation   | Long-term systemic effects | 4.87 mg/m3  |
|  | Consumers | Dermal       | Long-term systemic effects | 1.15 mg/kg  |



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|----------------------------|-----------|------------|----------------------------|-------------|
|                            | Consumers | Oral       | Long-term systemic effects | 1.39 mg/kg  |
| 2,6-di-tert-butyl-p-cresol | Workers   | Inhalation | Long-term systemic effects | 0.78 mg/m3  |
|                            | Workers   | Dermal     | Long-term systemic effects | 0.5 mg/kg   |
|                            | Consumers | Inhalation | Long-term systemic effects | 0.435 mg/m3 |
|                            | Consumers | Dermal     | Long-term systemic effects | 0.25 mg/kg  |
|                            | Consumers | Oral       | Long-term systemic effects | 0.25 mg/kg  |

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

| Substance name  | Environmental Compartment  | Value         |
|---|----------------------------|---------------|
| Propylidynetrimethanol, ethoxylated, esters with acrylic acid | Soil                       | 0.00644 mg/kg |
|   | Fresh water                | 0.00195 mg/l  |
|   | Fresh water sediment       | 0.038 mg/kg   |
|   | STP                        | 10 mg/l       |
|   | Marine water               | 0.000195 mg/l |
|   | Marine sediment            | 0.0038 mg/kg  |
|   | Intermittent Release       | 0.00195 mg/l  |
|   | Intermittent water release | 0.0195 mg/l   |
| Bisphenol A epoxy acrylate                                    | Fresh water                | 0.025 mg/l    |
|   | Marine water               | 0.003 mg/l    |
|   | Intermittent Release       | 1 mg/l        |
|   | Fresh water sediment       | 8.96 mg/kg    |
|   | Marine sediment            | 0.896 mg/kg   |
|   | STP                        | 10 mg/l       |
|   | Soil                       | 1.78 mg/kg    |
| aluminium powder (stabilised)                                 | Fresh water                | 0.0749 mg/l   |
|   | clarification plant        | 20 mg/l       |
| 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate            | Fresh water                | 0.014 mg/l    |
|   | Marine water               | 0.0014 mg/l   |
|   | Fresh water sediment       | 5.29 mg/kg    |
|   | Soil                       | 1.05 mg/kg    |
|   | STP                        | 3 mg/l        |
|   | Marine sediment            | 0.529 mg/kg   |
|   | oral (secondary poisoning) | 83.3 mg/kg    |
| Glycerol, propoxylated, esters with acrylic acid              | Fresh water                | 0.0057 mg/l   |
|   | Marine water               | 0.00057 mg/l  |
|   | Fresh water sediment       | 0.0168 mg/kg  |
|   | Marine sediment            | 0.00168 mg/kg |
|   | STP                        | 10 mg/l       |
|   | Soil                       | 0.0011 mg/kg  |

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|                            |                            |               |
|----------------------------|----------------------------|---------------|
| 2,6-di-tert-butyl-p-cresol | Fresh water                | 0.199 µg/l    |
|                            | Marine water               | 0.02 µg/l     |
|                            | STP                        | 0.017 mg/l    |
|                            | Fresh water sediment       | 0.0996 mg/kg  |
|                            | Marine sediment            | 0.00996 mg/kg |
|                            | Soil                       | 0.054 mg/kg   |
|                            | Secondary Poisoning        | 8.33 mg/kg    |
|                            | oral (secondary poisoning) | 16.67 mg/kg   |

### 8.2 Exposure controls

#### Personal protective equipment

Eye/face protection : Goggles  
Tightly fitting safety goggles  
Wear face-shield and protective suit for abnormal processing problems.

Hand protection  
Material : Solvent-resistant gloves (butyl-rubber)

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). The exact break through time can be obtained from the protective glove producer and this has to be observed. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Recommended preventive skin protection Skin should be washed after contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

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

Respiratory protection : Use suitable breathing protection if workplace concentration requires.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Form : liquid

Colour : silver

Odour : characteristic

Odour Threshold : No data available

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|   |  |
|---|--|
| Melting point/range   | : Not applicable                                       |
| Boiling point/boiling range                                   | : > 100 °C   |
| Flammability  | : No data available                                    |
| Upper explosion limit / Upper flammability limit              | : No data available                                    |
| Lower explosion limit / Lower flammability limit              | : No data available                                    |
| Flash point   | : > 100 °C   |
| Auto-ignition temperature                                     | : No data available                                    |
| Decomposition temperature                                     | : No data available                                    |
| pH  | : substance/mixture is non-soluble (in water)          |
| Viscosity, kinematic  | : No data available                                    |
| Solubility(ies)   |  |
| Water solubility  | : insoluble  |
| Solubility in other solvents                                  | : No data available                                    |
| Partition coefficient: n-octanol/water                        | : No data available                                    |
| Vapour pressure   | : No data available                                    |
| Vapor Pressure for Components:                                |  |
| Propylidynetrimethanol, ethoxylated, esters with acrylic acid | : 0.0032 Pa (20 °C)                                    |
| 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate            | : 1.5 Pa (25 °C)                                       |
| Glycerol, propoxylated, esters with acrylic acid              | : 0.0032 Pa (20 °C)<br>Method: OECD Test Guideline 104 |
| Relative density  | : No data available                                    |
| Density   | : 1.1 g/cm <sup>3</sup>                                |
| Relative vapour density                                       | : No data available                                    |
| Particle characteristics                                      |  |
| Particle Size Distribution                                    | : No data available                                    |

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### 9.2 Other information

No data available

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## 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 : Contact with acids and alkalis may release hydrogen.

No decomposition if stored and applied as directed.

### 10.4 Conditions to avoid

Conditions to avoid : Do not allow evaporation to dryness.

No data available

### 10.5 Incompatible materials

Materials to avoid : Acids  
Bases  
Oxidizing agents

### 10.6 Hazardous decomposition products

This information is not available.

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## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Not classified based on available information.

#### Components:

##### **ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate:**

Acute oral toxicity : (Rat): > 5,000 mg/kg  
Method: OECD Test Guideline 401

Acute dermal toxicity : (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 402

##### **aluminium powder (stabilised):**

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l

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Exposure time: 4 h  
Test atmosphere: dust/mist

### **1-isopropyl-2,2-dimethyltrimethylene diisobutyrate:**

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2,000 mg/kg  
Method: OECD Test Guideline 402

### **2,6-di-tert-butyl-p-cresol:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg  
Method: OECD Test Guideline 402

### **Skin corrosion/irritation**

Not classified based on available information.

#### **Product:**

Remarks : May cause skin irritation and/or dermatitis.

#### **Components:**

### **ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate:**

Remarks : May cause skin irritation and/or dermatitis.

### **1-isopropyl-2,2-dimethyltrimethylene diisobutyrate:**

Species : Rabbit  
Exposure time : 4 h  
Method : OECD Test Guideline 404  
Result : No skin irritation

### **Serious eye damage/eye irritation**

Causes serious eye irritation.

#### **Product:**

Remarks : May cause irreversible eye damage.

#### **Components:**

### **Propylidynetrimethanol, ethoxylated, esters with acrylic acid:**

Result : Irritating to eyes.

### **ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate:**

Remarks : Vapours may cause irritation to the eyes, respiratory system and the skin.

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### **1-isopropyl-2,2-dimethyltrimethylene diisobutyrate:**

|               |   |                         |
|---------------|---|-------------------------|
| Species       | : | Rabbit                  |
| Exposure time | : | 72 h                    |
| Method        | : | OECD Test Guideline 405 |
| Result        | : | No eye irritation       |

### **Glycerol, propoxylated, esters with acrylic acid:**

|        |   |                |
|--------|---|----------------|
| Result | : | Eye irritation |
|--------|---|----------------|

### **Respiratory or skin sensitisation**

#### **Skin sensitisation**

May cause an allergic skin reaction.

#### **Respiratory sensitisation**

Not classified based on available information.

#### **Product:**

|         |   |                       |
|---------|---|-----------------------|
| Remarks | : | Causes sensitisation. |
|---------|---|-----------------------|

#### **Components:**

### **Propylidynetrimethanol, ethoxylated, esters with acrylic acid:**

|        |   |  |
|--------|---|--|
| Result | : | May cause sensitisation by skin contact. |
|--------|---|--|

|         |   |  |
|---------|---|--|
| Remarks | : | Causes sensitisation.<br>May cause sensitisation of susceptible persons by skin contact. |
|---------|---|--|

### **Bisphenol A epoxy acrylate:**

|        |   |  |
|--------|---|--|
| Result | : | May cause sensitisation by skin contact. |
|--------|---|--|

### **ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate:**

|        |   |  |
|--------|---|--|
| Result | : | May cause sensitisation by skin contact. |
|--------|---|--|

### **2-Propenoic acid, ester with C12-16-alkyl glycidyl ether:**

|        |   |  |
|--------|---|--|
| Result | : | The product is a skin sensitiser, sub-category 1A. |
|--------|---|--|

### **Glycerol, propoxylated, esters with acrylic acid:**

|        |   |  |
|--------|---|--|
| Result | : | May cause sensitisation by skin contact. |
|--------|---|--|

### **Germ cell mutagenicity**

Not classified based on available information.

### **Carcinogenicity**

Not classified based on available information.

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### Reproductive toxicity

Suspected of damaging the unborn child.

### Components:

#### 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate:

Reproductive toxicity - : Some evidence of adverse effects on development, based on  
Assessment animal experiments.

### STOT - single exposure

Not classified based on available information.

### STOT - repeated exposure

Not classified based on available information.

### Aspiration toxicity

Not classified based on available information.

## 11.2 Information on other hazards

### Further information

### Product:

Remarks : No data available

---

## SECTION 12: Ecological information

### 12.1 Toxicity

### Components:

#### Bisphenol A epoxy acrylate:

#### Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

#### ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate:

#### Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

#### 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate:

Toxicity to daphnia and other : (Daphnia (water flea)): 2.46 mg/l  
aquatic invertebrates

#### Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

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### **2,6-di-tert-butyl-p-cresol:**

M-Factor (Short-term (acute) : 1  
aquatic hazard)

M-Factor (Long-term : 1  
(chronic) aquatic hazard)

### **Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

### **12.2 Persistence and degradability**

No data available

### **12.3 Bioaccumulative potential**

#### **Components:**

#### **Glycerol, propoxylated, esters with acrylic acid:**

Partition coefficient: n- : log Pow: 2.52 (23 °C)  
octanol/water Method: OECD Test Guideline 107

### **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 Endocrine disrupting properties**

No data available

### **12.7 Other adverse effects**

#### **Product:**

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

#### **Components:**

#### **ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate:**

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

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### Glycerol, propoxylated, esters with acrylic acid:

Additional ecological information : No data available

## 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.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

## SECTION 14: Transport information

### 14.1 UN number or ID number

ADR : UN 3082  
IMDG : UN 3082  
IATA : UN 3082

### 14.2 UN proper shipping name

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Bisphenol A Epoxy resin)  
IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Bisphenol A Epoxy resin)  
IATA : Environmentally hazardous substance, liquid, n.o.s.  
(Bisphenol A Epoxy resin)

### 14.3 Transport hazard class(es)

|      | Class | Subsidiary risks |
|------|-------|------------------|
| ADR  | : 9   |                  |
| IMDG | : 9   |                  |
| IATA | : 9   |                  |

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### 14.4 Packing group

#### ADR

|                              |       |
|------------------------------|-------|
| Packing group                | : III |
| Classification Code          | : M6  |
| Hazard Identification Number | : 90  |
| Labels                       | : 9   |
| Tunnel restriction code      | : (-) |

#### IMDG

|               |            |
|---------------|------------|
| Packing group | : III      |
| Labels        | : 9        |
| EmS Code      | : F-A, S-F |

#### IATA (Cargo)

|                                      |        |
|--------------------------------------|--------|
| Packing instruction (cargo aircraft) | : 964  |
| Packing instruction (LQ)             | : Y964 |
| Packing group                        | : III  |
| Labels                               | : 9    |

#### IATA (Passenger)

|  |        |
|--|--------|
| Packing instruction (passenger aircraft) | : 964  |
| Packing instruction (LQ)                 | : Y964 |
| Packing group                            | : III  |
| Labels                                   | : 9    |

### 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. |
|---------|---|

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

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### SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

|  |   |
|--|---|
| REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) | : Conditions of restriction for the following entries should be considered:<br>Number on list 3<br>Propylidynetrimethanol, ethoxylated, esters with acrylic acid (Number on list 3)<br>Bisphenol A epoxy acrylate (Number on list 3)<br>ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate (Number on list 3)<br>aluminium powder (stabilised) (Number on list 40)<br>1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (Number on list 3)<br>Glycerol, propoxylated, esters with acrylic acid (Number on list 3) |
| UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation  | : Not applicable  |
| The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)                            | : Not applicable  |
| Regulation (EC) No 1005/2009 on substances that deplete the ozone layer  | : Not applicable  |
| UK REACH List of substances subject to authorisation (Annex XIV)   | : Not applicable  |

#### 15.2 Chemical safety assessment

No data available

### SECTION 16: Other information

#### Full text of H-Statements

|       |   |
|-------|---|
| H228  | : Flammable solid.                                      |
| H317  | : May cause an allergic skin reaction.                  |
| H319  | : Causes serious eye irritation.                        |
| H361d | : 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.    |

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### Full text of other abbreviations

|                 |   |  |
|-----------------|---|--|
| Aquatic Acute   | : | Short-term (acute) aquatic hazard                      |
| Aquatic Chronic | : | Long-term (chronic) aquatic hazard                     |
| Eye Irrit.      | : | Eye irritation   |
| Flam. Sol.      | : | Flammable solids                                       |
| Repr.           | : | Reproductive toxicity                                  |
| Skin Sens.      | : | Skin sensitisation                                     |
| GB EH40         | : | UK. EH40 WEL - Workplace Exposure Limits               |
| GB EH40 / TWA   | : | Long-term exposure limit (8-hour TWA reference period) |

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; 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; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals 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

#### Classification of the mixture:

|                   |       |
|-------------------|-------|
| Eye Irrit. 2      | H319  |
| Skin Sens. 1      | H317  |
| Repr. 2           | H361d |
| Aquatic Chronic 2 | H411  |

#### Classification procedure:

|                    |
|--------------------|
| Calculation method |
| Calculation method |
| Calculation method |
| Calculation method |

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