**ECO-UV, EUV4-BK**
**ECO-UV, EUV4-5BK**

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 12/5/2024 Version: 5.0

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

### 1.1. Product identifier

Product form : Mixture
Trade name : ECO-UV, EUV4-BK
ECO-UV, EUV4-5BK
UFI : QFRE-YW1Y-4DKK-UG7M

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

#### Relevant identified uses

Main use category : Professional use
Function or use category : Inkjet Printing ink

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

**Manufacturer**
Roland DG Corporation
1-1-2 Shinmiyakoda, Hamana-ku,
Hamamatsu-shi,Shizuoka-ken, 431-2103 Japan
〒431-2103
T +81-53-484-1200

**Supplier**
Roland DG EMEA N.V.
Bell Telephonelaan 2G, 2440 Geel, Belgium
T +32 (0) 14 57 59 11
deu-demand-planning@rolanddg.com

### 1.4. Emergency telephone number

| Country/Area | Organisation/Company | Emergency number | Comment |
|---|---|---|---|
| Ireland | Poisons Information Centre of Ireland | +353 18 37 99 64 (medical professionals)<br>+353 18 09 21 66 (public) | |
| Malta | Malta Competition and Consumer Affairs Authority (MCCAA) | +356 2395 2000<br>1774 helpline for accidental poisoning | |
| United Kingdom | Emergency number England | 999<br>NHS 111 | or call a doctor |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

| | |
|---|---|
| Skin corrosion/irritation, Category 2 | H315 |
| Serious eye damage/eye irritation, Category 1 | H318 |
| Skin sensitisation, Category 1 | H317 |
| Reproductive toxicity, Category 1B | H360 |
| Specific target organ toxicity – Repeated exposure, Category 2 | H373 |
| Hazardous to the aquatic environment – Chronic Hazard, Category 1 | H410 |

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

### Adverse physicochemical, human health and environmental effects

May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Very toxic to aquatic life with long lasting effects.

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS05 GHS07 GHS08 GHS09

Signal word (CLP) : Danger

Contains : 2-Propenoic acid, phenylmethyl ester; 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester; N-VINYL CAPROLACTAM; 2-Propenoic acid, (tetrahydro-2-furanyl)methyl ester; 2-Propenoic acid, 1,6-hexanediyl ester; Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)-

Hazard statements (CLP) : H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H360 - May damage fertility or the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.

## 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

# SECTION 3: Composition/information on ingredients

## 3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| 2-Propenoic acid, phenylmethyl ester | CAS-No.: 2495-35-4<br>EC-No.: 219-673-9<br>REACH-no: 01-2120772339-44 | 50 – 60 | Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Aquatic Chronic 1, H410 |

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester | CAS-No.: 15625-89-5<br>EC-No.: 239-701-3<br>EC Index-No.: 607-111-00-9 | 5 – 10 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317 |
| N-VINYL CAPROLACTAM | CAS-No.: 2235-00-9<br>EC-No.: 218-787-6<br>REACH-no: 01-2119977109-27 | 5 – 10 | Acute Tox. 4 (Oral), H302 (ATE=1114 mg/kg bodyweight)<br>Acute Tox. 4 (Dermal), H312 (ATE=1700 mg/kg bodyweight)<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>STOT RE 1, H372 |
| Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)- substance listed as REACH Candidate | CAS-No.: 75980-60-8<br>EC-No.: 278-355-8<br>EC Index-No.: 015-203-00-X<br>REACH-no: 01-2119972295-29 | 5 – 10 | Skin Sens. 1, H317<br>Repr. 1B, H360 |
| 2-Propenoic acid, (tetrahydro-2-furanyl)methyl ester | CAS-No.: 2399-48-6<br>EC-No.: 219-268-7 | 1 – 5 | Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight)<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>Repr. 1B, H360<br>Aquatic Chronic 2, H411 |
| Additives | - | 0 – 5 | Not classified |
| Carbon Black | CAS-No.: 1333-86-4<br>EC-No.: 215-609-9<br>REACH-no: 01-2119969946-13 | 1 – 5 | Not classified |
| 2-Butenedioic acid (2Z)-, bis(2-ethylhexyl) ester | CAS-No.: 142-16-5<br>EC-No.: 205-524-5 | 1 – 3 | Not classified |
| 2-Propenoic acid, 1,6-hexanediyl ester | CAS-No.: 13048-33-4<br>EC-No.: 235-921-9<br>EC Index-No.: 607-109-00-8<br>REACH-no: 01-2119484737-22 | 0 – 1 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317 |

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.
First-aid measures for first aider : First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : None under normal conditions.
Chronic symptoms : May damage fertility or the unborn child.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

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

Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

General measures : Stop leak if safe to do so. Absorb spillage to prevent material damage.

#### For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapours/spray.

#### For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

### 6.2. Environmental precautions

Avoid release to the environment.

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

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Store locked up.

Packaging materials : Store always product in container of same material as original container.

### 7.3. Specific end use(s)

Inkjet Printing ink.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**DNEL and PNEC**

| 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (15625-89-5) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 404 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 17.1 mg/m³ |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 0.87 µg/l |

| 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (15625-89-5) | |
|---|---|
| PNEC aqua (marine water) | 0.087 µg/l |
| PNEC aqua (intermittent, freshwater) | 8.7 µg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 0.017 mg/kg dwt |
| PNEC sediment (marine water) | 0.0017 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 0.0029 mg/kg dwt |
| **PNEC (Oral)** | |
| PNEC oral (secondary poisoning) | 10 mg/kg food |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 6.25 mg/l |

| N-VINYL CAPROLACTAM (2235-00-9) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 0.7 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 4.9 mg/m³ |
| Long-term - local effects, inhalation | 0.17 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 0.4 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 1.04 mg/m³ |
| Long-term - systemic effects, dermal | 0.42 mg/kg bodyweight/day |
| Long-term - local effects, inhalation | 0.04 mg/m³ |

| 2-Propenoic acid, (tetrahydro-2-furanyl)methyl ester (2399-48-6) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 4.9 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 1.73 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 0.18 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 0.3 mg/m³ |
| Long-term - systemic effects, dermal | 1.75 mg/kg bodyweight/day |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 3.92 µg/l |
| PNEC aqua (marine water) | 0.392 µg/l |

| 2-Propenoic acid, (tetrahydro-2-furanyl)methyl ester (2399-48-6) | |
|---|---|
| PNEC aqua (intermittent, freshwater) | 39.2 µg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 0.0206 mg/kg dwt |
| PNEC sediment (marine water) | 0.0021 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 0.0018 mg/kg dwt |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 2.637 mg/l |

| 2-Propenoic acid, 1,6-hexanediyl ester (13048-33-4) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 2.77 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 24.5 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 2.1 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 7.2 mg/m³ |
| Long-term - systemic effects, dermal | 1.66 mg/kg bodyweight/day |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 0.00723 mg/l |
| PNEC aqua (marine water) | 0.000723 mg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 0.493 mg/kg dwt |
| PNEC sediment (marine water) | 0.0493 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 0.094 mg/kg dwt |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 2.7 mg/l |

| 2-Butenedioic acid (2Z)-, bis(2-ethylhexyl) ester (142-16-5) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 2.5 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 7 mg/m³ |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 0.00104 mg/l |

| 2-Butenedioic acid (2Z)-, bis(2-ethylhexyl) ester (142-16-5) | |
|---|---|
| PNEC aqua (marine water) | 0.000104 mg/l |
| PNEC aqua (intermittent, freshwater) | 0.00619 mg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 15.95 mg/kg dwt |
| PNEC sediment (marine water) | 1.595 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 3.19 mg/kg dwt |
| **PNEC (Oral)** | |
| PNEC oral (secondary poisoning) | 20 mg/kg food |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 100 mg/l |

| Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)- (75980-60-8) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 0.233 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 0.822 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 83.3 µg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 0.145 mg/m³ |
| Long-term - systemic effects, dermal | 83.3 µg/kg bodyweight/day |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 1.4 µg/l |
| PNEC aqua (marine water) | 0.14 µg/l |
| PNEC aqua (intermittent, freshwater) | 14 µg/l |
| PNEC aqua (intermittent, marine water) | 1.4 µg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 0.115 mg/kg dwt |
| PNEC sediment (marine water) | 11.5 µg/kg dw |
| **PNEC (Soil)** | |
| PNEC soil | 22.2 µg/kg dw |

## 8.2. Exposure controls

### Appropriate engineering controls

**Appropriate engineering controls:**
Ensure good ventilation of the work station.

### Personal protection equipment

**Personal protective equipment:**
Wear recommended personal protective equipment.

### Eye and face protection

**Eye protection:**
Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear EN166 approved safety glasses or chemical splash goggles.

### Skin protection

**Skin and body protection:**
Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear protective clothing.

**Hand protection:**
Employee must wear appropriate protective impervious gloves to prevent contact with the ink. Recommended Chemical Protective Gloves are EN420/374 approved ethylene vinyl alcohol (EVOH) Gloves and Laminate gloves. Laminate gloves are made by cutting and then heat-sealing patterns of various hand sizes from laminated sheets of EVOH sealed between layers of polyethylene.

### Respiratory protection

**Respiratory protection:**
In case of inadequate ventilation and exposure limits are exceeded or if irritation or other symptoms are experienced, use a NIOSH/MSHA or European Standard EN149 approved respirator (with activated carbon layer for organic vapour).

### Environmental exposure controls

**Environmental exposure controls:**
Avoid release to the environment.
**Other information:**
Wash hands immediately after handling the product.And wash it before reuse.Do not eat, drink or smoke during work.

## SECTION 9: Physical and chemical properties

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

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Colour | : | Black. |
| Appearance | : | Liquid. |
| Odour | : | characteristic. |
| Odour threshold | : | Not available |
| Melting point | : | Not applicable |
| Freezing point | : | Not available |
| Boiling point | : | Not available |
| Flammability | : | No data available |
| Lower explosion limit | : | Not available |
| Upper explosion limit | : | Not available |
| Flash point | : | > 70 °C |
| Auto-ignition temperature | : | Not available |
| Decomposition temperature | : | Not available |
| pH | : | Not available |
| Viscosity, kinematic | : | Not available |
| Solubility | : | Soluble in water with difficulty. |
| Partition coefficient n-octanol/water (Log Kow) | : | Not available |
| Vapour pressure | : | Not available |

| | | |
|---|---|---|
| Vapour pressure at 50°C | : | Not available |
| Density | : | 1 – 1.1 |
| Relative density | : | Not available |
| Relative vapour density at 20°C | : | Not available |
| Particle characteristics | : | Not applicable |

### 9.2. Other information

#### Other safety characteristics

| | | |
|---|---|---|
| SAPT | : | > 50 °C |
| VOC content | : | 0.061 g/l |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic gases/vapors.

## SECTION 11: Toxicological information

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

| | | |
|---|---|---|
| Acute toxicity (oral) | : | Not classified (Based on available data, the classification criteria are not met) |
| Acute toxicity (dermal) | : | Not classified (Based on available data, the classification criteria are not met) |
| Acute toxicity (inhalation) | : | Not classified (Based on available data, the classification criteria are not met) |
| Skin corrosion/irritation | : | Causes skin irritation.<br>pH: Not available |
| Serious eye damage/irritation | : | Causes serious eye damage.<br>pH: Not available |
| Respiratory or skin sensitisation | : | May cause an allergic skin reaction. |
| Germ cell mutagenicity | : | Not classified (Based on available data, the classification criteria are not met) |
| Carcinogenicity | : | IARC evaluated printing ink as a Group3(Not classifiable as to carcinogenicity to humans). |

| 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (15625-89-5) | |
|---|---|
| IARC group | 2B - Possibly carcinogenic to humans |

| Carbon Black (1333-86-4) | |
|---|---|
| IARC group | 2B - Possibly carcinogenic to humans |

Reproductive toxicity : May damage fertility or the unborn child.
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met).
Hazardous to the aquatic environment, long–term (chronic) : Very toxic to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

| ECO-UV, EUV4-BK<br>ECO-UV, EUV4-5BK | |
|---|---|
| Persistence and degradability | No data available. |

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

| | | |
|---|---|---|
| Regional waste regulation | : | Disposal must be done according to official regulations. |
| Waste treatment methods | : | Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Sewage disposal recommendations | : | Disposal must be done according to official regulations. |
| Product/Packaging disposal recommendations | : | Disposal must be done according to official regulations. |
| Additional information | : | Do not re-use empty containers. |
| European List of Waste (LoW, EC 2000/532) | : | 08 03 12* - waste ink containing dangerous substances |

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| Special provision(s) applied : 375 | Special provision(s) applied : 969 | Special provision(s) applied : A197 | Special provision(s) applied : 375 | Special provision(s) applied : 375 |
| These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. | | | | |
| **14.1. UN number or ID number** | | | | |
| UN 3082 | UN 3082 | UN 3082 | UN 3082 | UN 3082 |
| **14.2. UN proper shipping name** | | | | |
| ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. | Environmentally hazardous substance, liquid, n.o.s. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| **Transport document description** | | | | |
| UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (-) | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT | UN 3082 Environmentally hazardous substance, liquid, n.o.s., 9, III | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III |
| **14.3. Transport hazard class(es)** | | | | |
| 9 | 9 | 9 | 9 | 9 |
|  |  |  |  |  |
| **14.4. Packing group** | | | | |
| III | III | III | III | III |

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **14.5. Environmental hazards** | | | | |
| Dangerous for the environment: Yes | Dangerous for the environment: Yes<br>Marine pollutant: Yes<br>EmS-No. (Fire): F-A<br>EmS-No. (Spillage): S-F | Dangerous for the environment: Yes | Dangerous for the environment: Yes | Dangerous for the environment: Yes |
| No supplementary information available | | | | |

## 14.6. Special precautions for user

### Overland transport

Classification code (ADR) : M6
Special provisions (ADR) : 274, 335, 375, 601
Limited quantities (ADR) : 5l
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1, TP29
Tank code (ADR) : LGBV
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13
Hazard identification number (Kemler No.) : 90
Orange plates :


Tunnel restriction code (ADR) : -
EAC code : •3Z

### Transport by sea

Special provisions (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP01, P001
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP29
Stowage category (IMDG) : A

### Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964

| | | |
|---|---|---|
| PCA limited quantity max net quantity (IATA) | : | 30kgG |
| PCA packing instructions (IATA) | : | 964 |
| PCA max net quantity (IATA) | : | 450L |
| CAO packing instructions (IATA) | : | 964 |
| CAO max net quantity (IATA) | : | 450L |
| Special provisions (IATA) | : | A97, A158, A197, A215 |
| ERG code (IATA) | : | 9L |

### Inland waterway transport

| | | |
|---|---|---|
| Classification code (ADN) | : | M6 |
| Special provisions (ADN) | : | 274, 335, 375, 601 |
| Limited quantities (ADN) | : | 5 L |
| Excepted quantities (ADN) | : | E1 |
| Carriage permitted (ADN) | : | T |
| Equipment required (ADN) | : | PP |
| Number of blue cones/lights (ADN) | : | 0 |

### Rail transport

| | | |
|---|---|---|
| Classification code (RID) | : | M6 |
| Special provisions (RID) | : | 274, 335, 375, 601 |
| Limited quantities (RID) | : | 5L |
| Excepted quantities (RID) | : | E1 |
| Packing instructions (RID) | : | P001, IBC03, LP01, R001 |
| Special packing provisions (RID) | : | PP1 |
| Mixed packing provisions (RID) | : | MP19 |
| Portable tank and bulk container instructions (RID) | : | T4 |
| Portable tank and bulk container special provisions (RID) | : | TP1, TP29 |
| Tank codes for RID tanks (RID) | : | LGBV |
| Transport category (RID) | : | 3 |
| Special provisions for carriage – Packages (RID) | : | W12 |
| Special provisions for carriage - Loading, unloading and handling (RID) | : | CW13, CW31 |
| Colis express (express parcels) (RID) | : | CE8 |
| Hazard identification number (RID) | : | 90 |

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

Not applicable

# SECTION 15: Regulatory information

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

### EU-Regulations

### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

### REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)- (EC 278-355-8, CAS 75980-60-8)

### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

### VOC Directive (2004/42)

VOC content : 0.061 g/l

### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

| Abbreviations and acronyms: | |
|---|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| COD | Chemical oxygen demand (COD) |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC-No. | European Community number |
| EC50 | Median effective concentration |
| EN | European Standard |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |

| Abbreviations and acronyms: | |
|---|---|
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| ThOD | Theoretical oxygen demand (ThOD) |
| TLM | Median Tolerance Limit |
| VOC | Volatile Organic Compounds |
| CAS-No. | Chemical Abstract Service number |
| N.O.S. | Not Otherwise Specified |
| vPvB | Very Persistent and Very Bioaccumulative |
| ED | Endocrine disruptor |

| Full text of H- and EUH-statements: | |
|---|---|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment – Chronic Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment – Chronic Hazard, Category 2 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Full text of H- and EUH-statements: | |
|---|---|
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H360 | May damage fertility or the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| Repr. 1B | Reproductive toxicity, Category 1B |
| Skin Corr. 1C | Skin corrosion/irritation, Category 1, Sub-Category 1C |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| Skin Sens. 1 | Skin sensitisation, Category 1 |
| STOT RE 1 | Specific target organ toxicity – Repeated exposure, Category 1 |
| STOT RE 2 | Specific target organ toxicity – Repeated exposure, Category 2 |

RDG Safety Data Sheet (SDS), EU

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