

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier

Trade name or designation of the mixture UVgel 460 ink White

Other means of identification

Article Number 1070125789,1070124421
Registration number -
Synonyms None.
Product code 6125C001AA, 6125C002AA
Issue date 13-January-2023
Version number 4.3
Revision date 12-December-2023
Supersedes date 18-October-2023

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

Identified uses Inkjet printing ink.
Uses advised against Other uses not recommended.

1.3. Details of the supplier of the safety data sheet

Supplier Canon (UK) Ltd
Address 4 Roundwood Avenue, Stockley Park, Uxbridge, UB11 1AF, U.K.
Telephone number 01895 648000
E-mail address sds-hq@cpp.canon

1.4. Emergency telephone number

National Poison Information Centre 111 (Available 24 hours a day.)
NCEC Service +44 (0) 1235 239 670 For chemical emergencies only. (Available 24 hours a day.)

SECTION 2: Hazards identification
2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended
Health hazards

| | | |
|-----------------------------------|------------|---|
| Skin corrosion/irritation | Category 2 | H315 - Causes skin irritation. |
| Serious eye damage/eye irritation | Category 2 | H319 - Causes serious eye irritation. |
| Skin sensitisation | Category 1 | H317 - May cause an allergic skin reaction. |
| Carcinogenicity | Category 2 | H351 - Suspected of causing cancer. |

Environmental hazards

| | | |
|--|------------|---|
| Hazardous to the aquatic environment, long-term aquatic hazard | Category 2 | H411 - Toxic to aquatic life with long lasting effects. |
|--|------------|---|

2.2. Label elements
Label according to Regulation (EC) No. 1272/2008 as amended

Contains: (5-Ethyl-1,3-dioxan-5-yl)methyl acrylate, 2-Phenoxyethyl acrylate, 2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol, Trimethylolpropane triacrylate

Hazard pictograms


Signal word Warning

Hazard statements

| | |
|------|--|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H351 | Suspected of causing cancer. |
| H411 | Toxic to aquatic life with long lasting effects. |

Precautionary statements

Prevention

| | |
|------|---|
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves and eye/face protection. |

Response

| | |
|--------------------|--|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |

Storage

Not available.

Disposal

Not available.

Supplemental label information

EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3. Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|--|-----------|---------------------------|------------------------|--------------|-------|
| (5-Ethyl-1,3-dioxan-5-yl)methyl acrylate | 40 - < 60 | 66492-51-1 266-380-7 | 01-2119976303-36-XXXX | - | |
| Classification: Skin Irrit. 2;H315, Skin Sens. 1B;H317, Aquatic Chronic 2;H411 | | | | | |
| 2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol | 1 - < 5 | 67906-98-3 - | - | - | |
| Classification: Skin Irrit. 2;H315, Eye Irrit. 2;H319, Skin Sens. 1;H317 | | | | | |
| Alcohol | 1 - < 5 | Proprietary - | - | - | |
| Classification: Eye Irrit. 2;H319 | | | | | |
| Trimethylolpropane triacrylate | 1 - < 5 | 15625-89-5 239-701-3 | - | 607-111-00-9 | |
| Classification: Skin Irrit. 2;H315, Eye Irrit. 2;H319, Skin Sens. 1;H317, Carc. 2;H351, STOT SE 3;H335, Aquatic Acute 1;H400(M=1), Aquatic Chronic 2;H411 | | | | | |
| 2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol] | 1 - < 2.5 | 1393932-71-2 302-434-9 | 01-2119977121-41-XXXX | - | |
| Classification: Eye Irrit. 2;H319, Skin Sens. 1;H317, Aquatic Chronic 2;H411 | | | | | |
| hexamethylene diacrylate; hexane-1,6-diol diacrylate | < 1 | 13048-33-4 235-921-9 | - | 607-109-00-8 | |
| Classification: Skin Irrit. 2;H315, Eye Irrit. 2;H319, Skin Sens. 1;H317, Aquatic Acute 1;H400, Aquatic Chronic 1;H410 | | | | | |
| phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | < 1 | 162881-26-7 423-340-5 | 01-2119489401-38-xxxx | 015-189-00-5 | |
| Classification: Skin Sens. 1A;H317, Aquatic Chronic 4;H413 | | | | | |
| 2-Phenoxyethyl acrylate | < 0.25 | 48145-04-6 256-360-6 | - | - | |
| Classification: Skin Sens. 1A;H317, Repr. 2;H361, Aquatic Chronic 2;H411 | | | | | |

List of abbreviations and symbols that may be used above

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First aid measures

| | |
|--|---|
| General information | IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse. |
| 4.1. Description of first aid measures | |
| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. |
| Skin contact | Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse. |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. |
| 4.2. Most important symptoms and effects, both acute and delayed | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. |
| 4.3. Indication of any immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. |

SECTION 5: Firefighting measures

| | |
|---|--|
| General fire hazards | No unusual fire or explosion hazards noted. |
| 5.1. Extinguishing media | |
| Suitable extinguishing media | Use extinguishing agent suitable for type of surrounding fire. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| 5.2. Special hazards arising from the substance or mixture | Not available. |
| 5.3. Advice for firefighters | |
| Special protective equipment for firefighters | Wear suitable protective equipment. |
| Special fire fighting procedures | Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |

SECTION 6: Accidental release measures

| | |
|---|---|
| 6.1. Personal precautions, protective equipment and emergency procedures | |
| For non-emergency personnel | Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material. Wear appropriate personal protective equipment. |
| For emergency responders | Keep unnecessary personnel away. Avoid breathing mist/vapours. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. Use personal protection recommended in Section 8 of the SDS. |
| 6.2. Environmental precautions | Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. |
| 6.3. Methods and material for containment and cleaning up | Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. |

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist/vapours. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

Industrial

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits****UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1**

| Components | Type | Value | Form |
|-----------------------------------|------|----------------------|-------------|
| Titanium dioxide (CAS 13463-67-7) | TWA | 4 mg/m ³ | Respirable. |
| | | 10 mg/m ³ | Inhalable |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures

Follow standard monitoring procedures.

Derived no effect levels (DNELs)**Workers**

| Components | Value | Assessment factor | Notes |
|--|------------------------|-------------------|------------------------|
| 2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol] (CAS 1393932-71-2) | | | |
| Long-term, Systemic, Dermal | 1.67 mg/kg bw/day | 300 | Repeated dose toxicity |
| Long-term, Systemic, Inhalation | 5.88 mg/m ³ | 75 | Repeated dose toxicity |

Predicted no effect concentrations (PNECs)

| Components | Value | Assessment factor | Notes |
|--|-------------|-------------------|-------|
| 2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol] (CAS 1393932-71-2) | | | |
| Freshwater | 0.001 mg/l | 1000 | |
| Marine water | 0 mg/l | 10000 | |
| Sediment (freshwater) | 0.484 mg/kg | | |
| Sediment (marine water) | 0.048 mg/kg | | |
| Soil | 0.096 mg/kg | | |
| STP | 100 mg/l | 10 | |

8.2. Exposure controls**Appropriate engineering controls**

Provide adequate ventilation. See operator manual or safety data sheet of the printer.

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

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection

If contact is likely, safety glasses with side shields are recommended.

Skin protection**- Hand protection**

Wear appropriate chemical resistant gloves.: Ansell Microflex ® 93-260 (240 minutes)

- Other

No special protective equipment required.

Respiratory protection

Not required during normal intended use of this product.

Thermal hazards

Not normally needed.

Hygiene measures

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

Environmental exposure controls

Contain spills and prevent releases and observe national regulations on emissions. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance**

| | |
|---|---|
| Physical state | Liquid. |
| Form | Liquid. |
| Colour | White. |
| Odour | Very faint. |
| Odour threshold | Not available. |
| pH | Not applicable |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available |
| Flash point | 139.0 °C (282.2 °F) |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or explosive limits | |
| Explosive limit - lower (%) | Not applicable |
| Explosive limit – upper (%) | Not applicable |
| Vapour pressure | <70 mbar at 70 C |
| Vapour density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | 300 °C (572 °F) |
| Decomposition temperature | Not available. |
| Viscosity | > 190 - < 250 mPa·s at 17 C 12.5 mPa·s at 70 C |
| Explosive properties | Not explosive. |
| Oxidising properties | Not oxidising. |

9.2. Other information

| | |
|----------------|--|
| Density | 1.25 g/cm ³ at 25 C 1.20 g/cm ³ at 70 |
| VOC | 3.24 % 2010/75/EU 0 % Switzerland |

SECTION 10: Stability and reactivity

| | |
|---|---|
| 10.1. Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| 10.2. Chemical stability | Material is stable under normal conditions. |
| 10.3. Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| 10.4. Conditions to avoid | Contact with incompatible materials. |
| 10.5. Incompatible materials | None known. |
| 10.6. Hazardous decomposition products | No hazardous decomposition products are known. |

SECTION 11: Toxicological information**Information on likely routes of exposure**

| | |
|-------------------|---|
| Inhalation | Prolonged inhalation may be harmful. Under normal conditions of intended use, this material is not expected to be an inhalation hazard. |
|-------------------|---|

| | |
|---------------------|---|
| Skin contact | Causes skin irritation. May cause an allergic skin reaction. |
| Eye contact | Causes serious eye irritation. |
| Ingestion | Health injuries are not known or expected under normal use. |
| Symptoms | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. |

11.1. Information on toxicological effects

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

| Components | Species | Test Results |
|--|----------|---------------------------------------|
| (5-Ethyl-1,3-dioxan-5-yl)methyl acrylate (CAS 66492-51-1) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | > 2000 mg/kg |
| Oral | | |
| LD50 | Rat | > 2000 mg/kg |
| 2-Phenoxyethyl acrylate (CAS 48145-04-6) | | |
| Acute | | |
| Oral | | |
| LD50 | Rat | 5000 mg/kg |
| 2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol] (CAS 1393932-71-2) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rat | > 2000 mg/kg, 24 Hours |
| Inhalation | | |
| <i>Vapour</i> | | |
| LC50 | Rat | > 0.41 mg/l, 7 Hours read across |
| Oral | | |
| LD50 | Rat | > 5000 mg/kg OECD401 |
| hexamethylene diacrylate; hexane-1,6-diol diacrylate (CAS 13048-33-4) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 3650 mg/kg, 24 Hours |
| Oral | | |
| LD50 | Rat | > 5000 mg/kg |
| phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (CAS 162881-26-7) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rat | > 2000 ml/kg |
| Oral | | |
| LD50 | Rat | > 2000 mg/kg |
| Trimethylolpropane triacrylate (CAS 15625-89-5) | | |
| Acute | | |
| Oral | | |
| LD50 | Rat | > 5000 mg/kg |
| Skin corrosion/irritation Causes skin irritation. | | |
| Irritation Corrosion - Skin | | |
| hexamethylene diacrylate; hexane-1,6-diol diacrylate | OECD 404 | Result: Irritating Species: Rabbit |
| (5-Ethyl-1,3-dioxan-5-yl)methyl acrylate | OECD 404 | Result: Irritating Species: Rat |
| Trimethylolpropane triacrylate | OECD 404 | Result: Irritating Species: Rat |

Irritation Corrosion - Skin

2-Propenoic acid, reaction products with
2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]

OECD 404
Result: Not irritating
Species: Rabbit
OECD 404
Result: Not irritating
Species: Rabbit

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Serious eye damage/eye irritation Causes serious eye irritation.

Eye

(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate

EU B,5
Result: Not irritating
Species: Rabbit

hexamethylene diacrylate; hexane-1,6-diol diacrylate

OECD 405
Result: Irritating
Species: Rabbit

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

OECD 405
Result: Not irritating
Species: Rabbit
Result: Irritating

Trimethylolpropane triacrylate

Irritation Corrosion - Eye

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

OECD 405
Result: Not irritating
OECD405
Result: Irritating

2-Propenoic acid, reaction products with
2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]

Respiratory sensitisation Not a respiratory sensitiser.

Skin sensitisation May cause an allergic skin reaction.

Skin Sensitisation

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

OECD 406
Result: sensitising
Species: Guinea pig

hexamethylene diacrylate; hexane-1,6-diol diacrylate

OECD 406, GMPT
Result: sensitising
Species: Guinea pig

2-Propenoic acid, reaction products with
2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]

OECD 429
Result: positive
Species: Mouse

(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate

OECD 429
Result: sensitising
Severity: EC3=2,8%

hexamethylene diacrylate; hexane-1,6-diol diacrylate

OECD 429, LLNA
Result: sensitising
Species: Mouse

Severity: EC3 = 0,9%
Result: sensitising
Species: Human

Result: sensitising
Species: Human

Trimethylolpropane triacrylate

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Germ cell mutagenicity: Ames test

(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate

OECD 471
Result: Negative.

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

OECD 471
Result: Negative.

2-Propenoic acid, reaction products with
2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]
hexamethylene diacrylate; hexane-1,6-diol diacrylate

OECD 471
Result: positive
OECD 471, In vitro

Trimethylolpropane triacrylate

Result: Negative
OECD 471, In vitro
Result: Negative

Germ cell mutagenicity: Chromosome Aberration

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

OECD 473
Result: Negative.

Trimethylolpropane triacrylate

OECD 473, In vitro
Result: positive

Germ cell mutagenicity: Micronucleus

(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate

OECD 474
Result: Negative.

Germ cell mutagenicity: Micronucleus

2-Propenoic acid, reaction products with
2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]
Trimethylolpropane triacrylate

OECD 474
Result: Negative.
OECD 474, in vivo
Result: Negative
OECD 487, In vitro
Result: Negative

hexamethylene diacrylate; hexane-1,6-diol diacrylate

Mutagenicity

(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate

OECD 476
Result: Negative.

hexamethylene diacrylate; hexane-1,6-diol diacrylate

OECD 476
Result: Negative.

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

OECD 476
Result: Negative.

Trimethylolpropane triacrylate

OECD 476, In vitro
Result: positive
OECD 489, in vivo
Result: Negative

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Developmental effects

(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate

OECD 414
Result: Negative.
Species: Rat

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

OECD 414
Result: Negative.
Species: Rat

Trimethylolpropane triacrylate

OECD 422
Result: Negative
Species: Rat

Reproductivity

Trimethylolpropane triacrylate

OECD 422
Result: Negative
Species: Rat

(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate

OECD 422
Result: Negative.

hexamethylene diacrylate; hexane-1,6-diol diacrylate

OECD 422
Result: Negative.
Species: Rat

2-Propenoic acid, reaction products with
2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]

OECD 422, (similar product)
Result: Negative.
Species: Rat

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

OECD414
Result: Negative.

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure

Not classified.

hexamethylene diacrylate; hexane-1,6-diol diacrylate

OECD 422
Result: Negative.
Species: Rat
Result: Negative.
Species: Rat
Test Duration: 90 d

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Aspiration hazard

Not an aspiration hazard.

Mixture versus substance information

No information available.

SECTION 12: Ecological information**12.1. Toxicity**

Toxic to aquatic life with long lasting effects.

Components**Species****Test Results**

(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate (CAS 66492-51-1)

Aquatic*Acute*

Algae

EC50

Algae

34 mg/l, 72 h

Crustacea

LC50

Daphnia

20 mg/l, 48 h

| Components | | Species | Test Results |
|--|------|-----------------------------------|---|
| Fish | LC50 | Fish | 4 mg/l, 96 h |
| 2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol] (CAS 1393932-71-2) | | | |
| Aquatic | | | |
| <i>Acute</i> | | | |
| Fish | LC50 | Fish | 1.2 mg/l, 96 h |
| hexamethylene diacrylate; hexane-1,6-diol diacrylate (CAS 13048-33-4) | | | |
| Aquatic | | | |
| <i>Acute</i> | | | |
| Algae | EC50 | Algae | 1.5 mg/l, 72 h |
| Crustacea | LC50 | Daphnia | 2.6 mg/l, 48 h |
| Fish | LC50 | Fish | 0.38 mg/l, 96 h |
| <i>Chronic</i> | | | |
| Algae | NOEC | Algae | 0.5 mg/l, 21 d |
| Crustacea | NOEC | Daphnia | 0.14 mg/l, 21 d |
| phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (CAS 162881-26-7) | | | |
| Aquatic | | | |
| <i>Acute</i> | | | |
| Algae | EC50 | Algae | 0.26 mg/l, 72 h Supersaturated suspension |
| Crustacea | LC50 | Daphnia | 1.1 mg/l, 48 h Supersaturated suspension |
| Fish | LC50 | Fish | > 90 µg/l, 96 h Supersaturated suspension |
| <i>Chronic</i> | | | |
| Crustacea | NOEC | Crustacea | 8.1 µg/l, 21 d |
| Titanium dioxide (CAS 13463-67-7) | | | |
| Aquatic | | | |
| <i>Acute</i> | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | > 1000 mg/l, 48 hours |
| Fish | LC50 | Mummichog (Fundulus heteroclitus) | > 1000 mg/l, 96 hours |
| Trimethylolpropane triacrylate (CAS 15625-89-5) | | | |
| Aquatic | | | |
| <i>Acute</i> | | | |
| Algae | EC50 | Algae | > 4.9 - < 14.5 mg/l, 96 h |
| Crustacea | EC50 | Invertebrates (Invertebrates) | 19.9 mg/l, 48 h |
| Fish | LC50 | Fish | 0.87 mg/l, 96 h |
| 12.2. Persistence and degradability | | | |
| Biodegradability | | | |
| Percent Degradation (Aerobic Biodegradation) | | | |
| (5-Ethyl-1,3-dioxan-5-yl)methyl acrylate | | OECD 301B | Result: 28 |
| hexamethylene diacrylate; hexane-1,6-diol diacrylate | | 60 - 70 % OECD 310 | |
| 12.3. Bioaccumulative potential | | | |
| Partition coefficient | | | |
| n-octanol/water (log Kow) | | | |
| (5-Ethyl-1,3-dioxan-5-yl)methyl acrylate | | > 1.9 | |
| hexamethylene diacrylate; hexane-1,6-diol diacrylate | | 2.81, Log Kow | |
| phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | | 5.8 | |
| Trimethylolpropane triacrylate | | > 3.3 | |
| Bioconcentration factor (BCF) | | | |
| 2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol] | | 388 % v/w | |
| phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | | < 5 | |
| 12.4. Mobility in soil | | | |
| | | No data available. | |

Adsorption

Soil/Sediment Sorption - Log Koc

| | |
|--|------|
| hexamethylene diacrylate; hexane-1,6-diol diacrylate | 2.1 |
| phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | 3.85 |
| Trimethylolpropane triacrylate | 2.24 |

12.5. Results of PBT and vPvB assessment This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|-------------------------------------|---|
| Residual waste | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Disposal Considerations: EU waste codes 16 02 13* - discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12 |
| EU waste code | |
| 08 03 12* | waste ink containing hazardous substances |
| Disposal methods/information | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Special precautions | Dispose in accordance with all applicable regulations. |

SECTION 14: Transport information

ADR

| | |
|---|---|
| 14.1. UN number | UN3082 |
| 14.2. UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5-Ethyl-1,3-dioxan-5-yl)methyl acrylate, Trimethylolpropane triacrylate) |
| 14.3. Transport hazard class(es) | |
| Class | 9 |
| Subsidiary risk | - |
| Label(s) | 9 |
| Hazard No. (ADR) | 90 |
| Tunnel restriction code | E |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | Yes |
| 14.6. Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

RID

| | |
|---|---|
| 14.1. UN number | UN3082 |
| 14.2. UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5-Ethyl-1,3-dioxan-5-yl)methyl acrylate, Trimethylolpropane triacrylate) |
| 14.3. Transport hazard class(es) | |
| Class | 9 |
| Subsidiary risk | - |
| Label(s) | 9 |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | Yes |
| 14.6. Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

ADN

| | |
|---|---|
| 14.1. UN number | UN3082 |
| 14.2. UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5-Ethyl-1,3-dioxan-5-yl)methyl acrylate, Trimethylolpropane triacrylate) |
| 14.3. Transport hazard class(es) | |
| Class | 9 |
| Subsidiary risk | - |
| Label(s) | 9 |
| 14.4. Packing group | III |

14.5. Environmental hazards Yes

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number UN3082

14.2. UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. ((5-Ethyl-1,3-dioxan-5-yl)methyl acrylate, TRIMETHYLOLPROPANE TRIACRYLATE)

14.3. Transport hazard class(es)

Class 9

Subsidiary risk -

14.4. Packing group III

14.5. Environmental hazards Yes

ERG Code 9L

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

IMDG

14.1. UN number UN3082

14.2. UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5-Ethyl-1,3-dioxan-5-yl)methyl acrylate, TRIMETHYLOLPROPANE TRIACRYLATE), MARINE POLLUTANT

14.3. Transport hazard class(es)

Class 9

Subsidiary risk -

14.4. Packing group III

14.5. Environmental hazards

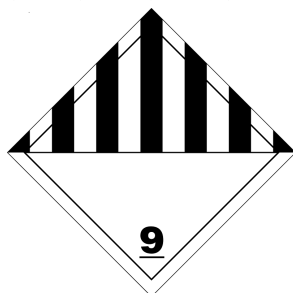
Marine pollutant Yes

EmS F-A, S-F

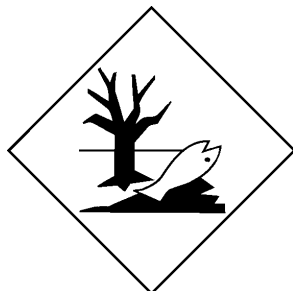
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

ADN; ADR; IATA; IMDG; RID



Marine pollutant



General information

IMDG Regulated Marine Pollutant.

SECTION 15: Regulatory information

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

Retained direct EU regulations

Material name: UVgel 460 ink White

6125C001AA, 6125C002AA Version #: 4.3 Revision date: 12-December-2023 Issue date: 13-January-2023

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Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Titanium dioxide (CAS 13463-67-7)

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended - Conditions of restriction given for the associated entry number should be considered

Not listed.

Other regulations

This product is in compliance with Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronics equipment (RoHS).

Not available.

15.2. Chemical safety assessment

This safety data sheet contains an ES in an integrated form. Contents of the exposure scenario have been included into sections 1.2, 8, 9, 12, 15 and 16 of this safety data sheet.

SECTION 16: Other information

List of abbreviations

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.

CAS: Chemical Abstract Service.

CEN: European Committee for Standardization.

IATA: International Air Transport Association.

IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.

IMDG: International Maritime Dangerous Goods.

MARPOL: International Convention for the Prevention of Pollution from Ships.

PBT: Persistent, bioaccumulative and toxic.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STEL: Short term exposure limit.

TWA: Time Weighted Average.

vPvB: Very persistent and very bioaccumulative.

References

Not available.

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements, which are not written out in full under sections 2 to 15

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.

H361 Suspected of damaging fertility or 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.

H413 May cause long lasting harmful effects to aquatic life.

Revision information

Product and Company Identification: Material Articles
Composition / Information on Ingredients: Disclosure Overrides
SECTION 11: Toxicological information: Carcinogenicity

Training information

Follow training instructions when handling this material.

Disclaimer

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation and is believed to be accurate. It provides guidance on health, safety and environmental aspects of the product and should neither be construed as any guarantee of specific properties nor of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1. This document was prepared to the requirements of the jurisdiction in Section 1 and may not meet regulatory requirements in other countries or territories. The information contained in this safety data sheet does not replace the user's own assessment of workplace risks, as required by applicable health and safety legislation.