

Safety data sheet

Page: 1/21

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

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

1.1. Product identifier

Ultracur3D® EL60

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

Recommended use: resin, Printing inks, Chemical

1.3. Details of the supplier of the safety data sheet

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Telephone: +49 621 60-0

E-mail address: global.info@basf.com

1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

According to Regulation (EC) No 1272/2008 [CLP]

Skin Corr./Irrit. 2
 Skin Sens. 1A
 Repr. 2 (unborn child)
 Aquatic Chronic 2

H315, H317, H361d, H411

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

Globally Harmonized System, EU (GHS)

Pictogram:



Signal Word:

Warning

Hazard Statement:

| | |
|-------|--|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H361d | Suspected of damaging the unborn child. |
| H411 | Toxic to aquatic life with long lasting effects. |

Precautionary Statements (Prevention):

| | |
|------|--|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P273 | Avoid release to the environment. |

Precautionary Statements (Response):

| | |
|-------------|---|
| P303 + P352 | IF ON SKIN (or hair): Wash with plenty of soap and water. |
|-------------|---|

Precautionary Statements (Storage):

| | |
|------|------------------|
| P405 | Store locked up. |
|------|------------------|

Precautionary Statements (Disposal):

| | |
|------|---|
| P501 | Dispose of contents/container to hazardous or special waste collection point. |
|------|---|

According to Regulation (EC) No 1272/2008 [CLP]

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

Hazard determining component(s) for labelling: 2-Phenoxyethyl acrylate, diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, (5-Ethyl-1,3-dioxan-5-yl)methyl acrylate, 2,2-bis(acryloyloxymethyl)butyl acrylate

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

Blend based on: acrylic resin

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

5-Ethyl-1,3-dioxane-5-methanol

Content (W/W): $\geq 0\%$ - $< 3\%$

CAS Number: 5187-23-5

EC-Number: 225-967-8

Eye Dam./Irrit. 2

H319

2,2-bis(acryloyloxymethyl)butyl acrylate

Content (W/W): $\geq 0.3\%$ - $< 3\%$

CAS Number: 15625-89-5

EC-Number: 239-701-3

REACH registration number: 01-

2119489896-11

INDEX-Number: 607-111-00-9

Skin Corr./Irrit. 2

Eye Dam./Irrit. 2

Skin Sens. 1

Aquatic Acute 1

Aquatic Chronic 1

M-factor acute: 1

H319, H315, H317, H400, H410

2-Phenoxyethyl acrylate

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

| | |
|---|------------------------|
| Content (W/W): $\geq 7\%$ - $< 15\%$ | Skin Sens. 1A |
| CAS Number: 48145-04-6 | Repr. 2 (unborn child) |
| EC-Number: 256-360-6 | Aquatic Chronic 2 |
| REACH registration number: 01-2119980532-35 | H317, H361d, H411 |

diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

| | |
|-------------------------------------|------------------------|
| Content (W/W): $\geq 1\%$ - $< 3\%$ | Skin Sens. 1B |
| CAS Number: 75980-60-8 | Repr. 2 (fertility) |
| EC-Number: 278-355-8 | Repr. 2 (unborn child) |
| | Aquatic Chronic 2 |
| | H317, H361fd, H411 |

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

| | |
|---|---------------------|
| Content (W/W): $\geq 20\%$ - $< 25\%$ | Skin Corr./Irrit. 2 |
| CAS Number: 66492-51-1 | Skin Sens. 1B |
| EC-Number: 266-380-7 | Aquatic Chronic 2 |
| REACH registration number: 01-2119976303-36 | H315, H317, H411 |

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

Immediately remove contaminated clothing.

If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., (Further) symptoms and / or effects are not known so far

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:

water jet

5.2. Special hazards arising from the substance or mixture

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Breathing protection required.

6.2. Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

Heated containers should be cooled to prevent polymerization. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

The product in undamaged packing need not be stored separately.

Suitable materials for containers: High density polyethylene (HDPE), Aluminium

Further information on storage conditions: Protect against heat. Protect from the effects of light. The stabilizer is only effective in the presence of oxygen.

Storage stability:

Storage temperature: -15 - 40 °C

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials for short-term contact (recommended: At least protective index 2, corresponding > 30 minutes of permeation time according to EN 374)

butyl rubber (butyl) - 0.7 mm coating thickness

nitrile rubber (NBR) - 0.4 mm coating thickness

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Under no circumstances should the product come into contact with the skin of pregnant women or be inhaled by them. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with the skin, eyes and clothing. Avoid inhalation. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Wash contaminated clothing before reuse.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|------------------------|--|
| Form: | liquid |
| Colour: | slightly yellow clear |
| Odour: | acrylic-like |
| Odour threshold: | |
| | not determined |
| pH value: | 7 |
| Melting temperature: | |
| | No data available. |
| Boiling point: | > 100 °C |
| Flash point: | > 100 °C |
| Evaporation rate: | |
| | not determined, Value can be approximated from Henry's Law Constant or vapor pressure. |
| Flammability: | not highly flammable |
| Lower explosion limit: | |
| | For liquids not relevant for classification and labelling. |
| Upper explosion limit: | |
| | For liquids not relevant for classification and labelling. |
| Ignition temperature: | |
| | not determined |
| Vapour pressure: | |
| | not determined |
| Density: | 1.02 g/cm ³ (20 °C) |
| Relative density: | approx. 1.02 (20 °C) |
| | No data available. |

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

Relative vapour density (air):
not determined

Solubility in water: sparingly soluble

Solubility (qualitative) solvent(s): organic solvents
soluble

Partitioning coefficient n-octanol/water (log Kow):
not applicable for mixtures

Self ignition: not self-igniting

Thermal decomposition: 137 °C, 178 kJ/kg,

Viscosity, dynamic: 4,300 mPa.s
(25 °C)
810 mPa.s
(50 °C)

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

9.2. Other information

Self heating ability: not applicable, the product is a liquid

Hygroscopy: hygroscopic

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

SECTION 10: Stability and Reactivity

10.1. Reactivity

Corrosion to metals: Corrosive effects to metal are not anticipated.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

The product can polymerize if the shelf life or storage temperature are greatly exceeded. Heat develops during polymerization. Reacts with peroxides and other radical components.

The product is stabilized against spontaneous polymerization prior to despatch.

10.4. Conditions to avoid

See MSDS section 7 - Handling and storage.

10.5. Incompatible materials

Substances to avoid:
free radical initiators

10.6. Hazardous decomposition products

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. Virtually nontoxic after a single ingestion. The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation

Assessment of irritating effects:

Skin contact causes irritation.

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

Assessment of irritating effects:

Not irritating to the eyes. Causes skin irritation.

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Assessment of irritating effects:

Eye contact causes irritation. Skin contact causes irritation.

Information on: 5-Ethyl-1,3-dioxane-5-methanol

Assessment of irritating effects:

Eye contact causes irritation. Not irritating to the skin.

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

Experimental/calculated data:

Skin corrosion/irritation rabbit: Irritant. (OECD Guideline 404)

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Experimental/calculated data:

Skin corrosion/irritation rabbit: Irritant. (Draize test)

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Experimental/calculated data:

Serious eye damage/irritation rabbit: Irritant. (Draize test)

Information on: 5-Ethyl-1,3-dioxane-5-methanol

Experimental/calculated data:

Serious eye damage/irritation: Irritant.

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

Respiratory/Skin sensitization

Assessment of sensitization:
Sensitization after skin contact possible.

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

*Assessment of sensitization:
Caused skin sensitization in animal studies.*

Information on: 2-Phenoxyethyl acrylate

*Assessment of sensitization:
Caused skin sensitization in animal studies.*

Information on: diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

*Assessment of sensitization:
Caused skin sensitization in animal studies.*

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

*Assessment of sensitization:
Caused skin sensitization in animal studies.*

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

*Experimental/calculated data:
Mouse Local Lymph Node Assay (LLNA) mouse: skin sensitizing (OECD Guideline 429)*

Information on: 2-Phenoxyethyl acrylate

*Experimental/calculated data:
Guinea pig maximization test guinea pig: skin sensitizing (OECD Guideline 406)*

Information on: diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

*Experimental/calculated data:
Mouse Local Lymph Node Assay (LLNA) mouse: skin sensitizing (OECD Guideline 429)*

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

*Experimental/calculated data:
Guinea pig maximization test guinea pig: skin sensitizing (similar to OECD guideline 406)*

Germ cell mutagenicity

Assessment of mutagenicity:
Based on the ingredients, there is no suspicion of a mutagenic effect.

Carcinogenicity

Assessment of carcinogenicity:
The whole of the information assessable provides no indication of a carcinogenic effect.

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

Reproductive toxicity

Assessment of reproduction toxicity:

Based on the ingredients, there is a suspicion of a toxic effect on reproduction. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

Assessment of reproduction toxicity:

The results of animal studies suggest a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

Information on: 2-Phenoxyethyl acrylate

Assessment of teratogenicity:

Possible risk of harm to the unborn child.

Information on: diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

Assessment of teratogenicity:

At high doses there are indications of a developmental effect.

Specific target organ toxicity (single exposure)

Remarks: Based on available Data, the classification criteria are not met.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

The information available on the product provides no indication of toxicity on target organs after repeated exposure. The product has not been tested. The statement has been derived from the properties of the individual components.

Aspiration hazard

No aspiration hazard expected.

Other relevant toxicity information

The product has not been tested. The statement has been derived from the properties of the individual components.

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

Acutely toxic for aquatic organisms. May cause long-term adverse effects in the aquatic environment. The product has not been tested. The statement has been derived from the properties of the individual components.

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

Toxicity to fish:

LC50 (96 h) 4 mg/l, Oncorhynchus mykiss (OECD Guideline 203, semistatic)

The details of the toxic effect relate to the nominal concentration.

LC50 (96 h) 4.04 mg/l, Fish (calculated)

LC50 (96 h) 3.909 mg/l, Fish (calculated)

Information on: 2-Phenoxyethyl acrylate

Toxicity to fish:

LC50 (96 h) approx. 10 mg/l, Leuciscus idus (DIN 38412 Part 15, static)

The details of the toxic effect relate to the nominal concentration.

Information on: diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Toxicity to fish:

LC50 (48 h) 6.53 mg/l, Oryzias latipes (JIS K 0102-71, semistatic)

The details of the toxic effect relate to the nominal concentration.

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Toxicity to fish:

LC50 (96 h) 0.87 mg/l, Brachydanio rerio (OECD 203; ISO 7346; 92/69/EEC, C.1, semistatic)

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

Aquatic invertebrates:

EC50 (48 h) 20 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The details of the toxic effect relate to the nominal concentration.

EC50 (48 h) 7.07 mg/l, daphnia (calculated)

EC50 (48 h) 11.6 mg/l, daphnia (calculated)

Information on: 2-Phenoxyethyl acrylate

Aquatic invertebrates:

EC50 (48 h) 1.2 mg/l, Daphnia magna (Directive 79/831/EEC, static)

The details of the toxic effect relate to the nominal concentration.

Information on: diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

Aquatic invertebrates:

EC50 (48 h) 3.53 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The statement of the toxic effect relates to the analytically determined concentration.

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Aquatic invertebrates:

EC50 (48 h) 19.9 mg/l, Daphnia magna (Directive 79/831/EEC, static)

The details of the toxic effect relate to the nominal concentration.

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

Aquatic plants:

EC50 (72 h) 34 mg/l (growth rate), Desmodemus subspicatus (OECD Guideline 201, static)

The details of the toxic effect relate to the nominal concentration.

No observed effect concentration (72 h) 9 mg/l (growth rate), Desmodemus subspicatus (OECD Guideline 201, static)

The details of the toxic effect relate to the nominal concentration.

EC50 (96 h) 2.028 mg/l, algae (calculated)

EC50 (96 h) 14 mg/l, algae (calculated)

Information on: 2-Phenoxyethyl acrylate

Aquatic plants:

EC50 (72 h) 4.4 mg/l (growth rate), Scenedesmus subspicatus (DIN 38412 Part 9, static)

The details of the toxic effect relate to the nominal concentration.

EC10 (72 h) 0.71 mg/l (growth rate), Scenedesmus subspicatus (DIN 38412 Part 9, static)

The details of the toxic effect relate to the nominal concentration.

Information on: diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Aquatic plants:

EC50 (72 h) > 2.01 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)

The statement of the toxic effect relates to the analytically determined concentration.

EC10 (72 h) 1.56 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)

The statement of the toxic effect relates to the analytically determined concentration.

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Aquatic plants:

EC10 (72 h) 1.9 mg/l (growth rate), Desmodemus subspicatus (Guideline 92/69/EEC, C.3, static)

EC50 (72 h) 18.8 mg/l (growth rate), Desmodemus subspicatus (Guideline 92/69/EEC, C.3, static)

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

Microorganisms/Effect on activated sludge:

EC50 > 1,000 mg/l, (OECD Guideline 209, aerobic)

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

Information on: 2-Phenoxyethyl acrylate

Microorganisms/Effect on activated sludge:

EC50 (3 h) 177 mg/l, activated sludge, domestic, non-adapted (OECD Guideline 209, aerobic)

Information on: diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

Microorganisms/Effect on activated sludge:

EC20 (3 h) > 1,000 mg/l, activated sludge, domestic (OECD Guideline 209, aerobic)

Limit concentration test only (LIMIT test). The details of the toxic effect relate to the nominal concentration.

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Microorganisms/Effect on activated sludge:

EC20 (30 min) 625 mg/l, activated sludge, domestic (DIN EN ISO 8192, aquatic)

Nominal concentration.

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

Chronic toxicity to fish:

Study not necessary due to exposure considerations.

Information on: 2-Phenoxyethyl acrylate

Chronic toxicity to fish:

No data available.

Information on: diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

Chronic toxicity to fish:

No data available regarding toxicity to fish.

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Chronic toxicity to fish:

No data available.

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

Chronic toxicity to aquatic invertebrates:

Study not necessary due to exposure considerations.

Information on: 2-Phenoxyethyl acrylate

Chronic toxicity to aquatic invertebrates:

EC10 (21 d) approx. 0.1 mg/l, Daphnia magna (OECD Guideline 211)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

Chronic toxicity to aquatic invertebrates:

No data available regarding toxicity to daphnids.

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Chronic toxicity to aquatic invertebrates:

No data available.

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

 Assessment of terrestrial toxicity:
 No data available concerning terrestrial toxicity.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H₂O):
 Moderately/partially eliminated from water.
 The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: (5-Ethyl-1,3-dioxan-5-yl)methyl acrylate
Assessment biodegradation and elimination (H₂O):
Not readily biodegradable (by OECD criteria).

Information on: 2-Phenoxyethyl acrylate
Assessment biodegradation and elimination (H₂O):
Inherently biodegradable. Easily eliminated from water.

Information on: diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide
Assessment biodegradation and elimination (H₂O):
Poorly biodegradable. Not readily biodegradable (by OECD criteria).

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate
Assessment biodegradation and elimination (H₂O):
Readily biodegradable (according to OECD criteria).

Information on: 5-Ethyl-1,3-dioxane-5-methanol
Assessment biodegradation and elimination (H₂O):
Not readily biodegradable (by OECD criteria). Easily eliminated from water.

Information on: (5-Ethyl-1,3-dioxan-5-yl)methyl acrylate
Elimination information:
 28 % DOC reduction (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge, domestic, non-adapted)

(calculated) Not readily biodegradable (by OECD criteria).

Information on: 2-Phenoxyethyl acrylate
Elimination information:
 22.3 % BOD of the ThOD (28 d) (OECD 301D; EEC 92/69, C.4-E) (aerobic, domestic sewage, non-adapted)

> 95 % DOC reduction (28 d) (OECD Guideline 302 B) (aerobic, activated sludge, industrial)

Information on: diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide
Elimination information:
 0 - 10 % BOD of the ThOD (28 d) (OECD Guideline 301 F) (aerobic, activated sludge, domestic)

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Elimination information:

82 - 90 % CO₂ formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge, domestic, non-adapted)

Information on: 5-Ethyl-1,3-dioxane-5-methanol

Elimination information:

90 - 100 % (Directive 88/302/EEC, part C, p. 99)

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

The product has not been tested.

Information on: 2-Phenoxyethyl acrylate

Assessment bioaccumulation potential:

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Information on: diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

Assessment bioaccumulation potential:

Does not significantly accumulate in organisms.

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Assessment bioaccumulation potential:

Significant accumulation in organisms is not to be expected.

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

Bioaccumulation potential:

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Information on: 2-Phenoxyethyl acrylate

Bioaccumulation potential:

No data available.

Information on: diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

Bioaccumulation potential:

Bioconcentration factor: 23 - 55 (56 d), Cyprinus carpio (measured)

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Bioaccumulation potential:

Bioconcentration factor: 21, Fish (calculated)

No significant accumulation in organisms is expected as a result of the distribution coefficient of n-octanol/water (log Pow).

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

12.4. Mobility in soil

Assessment transport between environmental compartments:

Volatility: No data available.

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

Assessment transport between environmental compartments:

Volatility: The substance will not evaporate into the atmosphere from the water surface.

Adsorption in soil: Adsorption to solid soil phase is not expected.

Information on: 2-Phenoxyethyl acrylate

Assessment transport between environmental compartments:

Volatility: The substance will not evaporate into the atmosphere from the water surface.

Adsorption in soil: Adsorption to solid soil phase is not expected.

Information on: diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Assessment transport between environmental compartments:

Volatility: The substance will not evaporate into the atmosphere from the water surface.

Adsorption in soil: Adsorption to solid soil phase is not expected.

Information on: 2,2-bis(acryloyloxymethyl)butyl acrylate

Assessment transport between environmental compartments:

Volatility: The substance will slowly evaporate into the atmosphere from the water surface.

Adsorption in soil: Adsorption to solid soil phase is not expected.

12.5. Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

12.6. Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

12.7. Additional information

Add. remarks environm. fate & pathway:

Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:

Do not discharge product into the environment without control.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:

Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

SECTION 14: Transport Information

Land transport

ADR

UN number: UN3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains (5-ETHYL-1,3-DIOXAN-5-YL)METHYL ACRYLATE, TRIMETHYLOLPROPANE TRIACRYLATE)
Transport hazard class(es): 9, EHS
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

RID

UN number: UN3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains (5-ETHYL-1,3-DIOXAN-5-YL)METHYL ACRYLATE, TRIMETHYLOLPROPANE TRIACRYLATE)
Transport hazard class(es): 9, EHS
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

Inland waterway transport

ADN

UN number: UN3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains (5-ETHYL-1,3-DIOXAN-5-YL)METHYL ACRYLATE, TRIMETHYLOLPROPANE TRIACRYLATE)
Transport hazard class(es): 9, EHS
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

user:

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

UN number: UN 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains (5-ETHYL-1,3-DIOXAN-5-YL)METHYL ACRYLATE, TRIMETHYLOLPROPANE TRIACRYLATE)
Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Marine pollutant: YES
Special precautions for user: None known

Air transport

IATA/ICAO

UN number: UN 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains (5-ETHYL-1,3-DIOXAN-5-YL)METHYL ACRYLATE, TRIMETHYLOLPROPANE TRIACRYLATE)
Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

14.1. UN number

See corresponding entries for "UN number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

| | |
|---------------------|---------------|
| Regulation: | Not evaluated |
| Shipment approved: | Not evaluated |
| Pollution name: | Not evaluated |
| Pollution category: | Not evaluated |
| Ship Type: | Not evaluated |

SECTION 15: Regulatory Information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

SECTION 16: Other Information

Any other intended applications should be discussed with the manufacturer.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

| | |
|-------------------|--|
| Skin Corr./Irrit. | Skin corrosion/irritation |
| Skin Sens. | Skin sensitization |
| Repr. | Reproductive toxicity |
| Aquatic Chronic | Hazardous to the aquatic environment - chronic |
| Eye Dam./Irrit. | Serious eye damage/eye irritation |

 BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 30.07.2019

Version: 1.0

Date previous version: not applicable

Previous version: none

Product: **Ultracur3D® EL60**

(ID no. 11128307/SDS_GEN_EU/EN)

Date of print 24.11.2020

| | |
|---------------|--|
| Aquatic Acute | Hazardous to the aquatic environment - acute |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H361d | Suspected of damaging the unborn child. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H319 | Causes serious eye irritation. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |

Abbreviations

ADR = The Regulation concerning the International Carriage of Dangerous Goods by Road. **ADN** = The Regulation concerning the International Carriage of Dangerous Goods by inland waterways. **ATE** = Acute Toxicity Estimates. **CAO** = Cargo Aircraft Only. **CAS** = Chemical Abstract Service. **CLP** = Label Classification, Labelling and Packaging Regulation. **DIN** = German national organization for standardization. **DNEL** = Derived No Effect Level. **EC50** = Effective concentration median for 50% of the population. **EC** = European Community. **EN** = European Norm. **IARC** = International Agency for Research on Cancer. **IATA** = International Air Transport Association. **IBC-Code** = Intermediate Bulk Container code. **IMDG** = International Maritime Dangerous Goods Code. **ISO** = International Organization for Standardization. **STE** = Short time exposure. **LC50** = Lethal concentration median for 50% of the population. **LD50** = Lethal dose median for 50% of the population. **MAK** = Maximum acceptable concentration. **MARPOL** = The International Convention for the Prevention of Pollution from Ships. **NEN** = Dutch Norm. **NOEC** = No Observed Effect Concentration. **OEL** = Occupational Exposure Limit. **OECD** = Organization for Economic Cooperation and Development. **PBT** = Persistent, Bioaccumulative and Toxic. **PNEC** = Predicted No Effect Level. **ppm** = parts per million. **RID** = The Regulation concerning the International Carriage of Dangerous Goods by Rail. **TWA** = Time weight average. **UN-number** = UN number at transport. **vPvB** = very Persistent and very Bioaccumulative.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

 Vertical lines in the left hand margin indicate an amendment from the previous version.