

# Safety data sheet

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

Date / Revised: 28.01.2019

Version: 1.0

Product: **Ultracur3D ST45 B**

(ID no. 30770320/SDS\_GEN\_EU/EN)

Date of print 16.07.2020

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

### 1.1. Product identifier

**Ultracur3D ST45 B**

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

### 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](mailto:global.info@basf.com)

### 1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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## SECTION 2: Hazards Identification

### 2.1. Classification of the substance or mixture

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

Acute Tox. 4 (oral)

Skin Corr./Irrit. 2

Eye Dam./Irrit. 1

Skin Sens. 1B

STOT RE 2 (oral)

Aquatic Chronic 3

H318, H315, H302, H317, H373, H412

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:

Danger

Hazard Statement:

|      |                                                                         |
|------|-------------------------------------------------------------------------|
| H318 | Causes serious eye damage.                                              |
| H315 | Causes skin irritation.                                                 |
| H302 | Harmful if swallowed.                                                   |
| H317 | May cause an allergic skin reaction.                                    |
| H373 | May cause damage to organs through prolonged or repeated oral exposure. |
| H412 | Harmful to aquatic life with long lasting effects.                      |

Precautionary Statements (Prevention):

|      |                                                                        |
|------|------------------------------------------------------------------------|
| P280 | Wear protective gloves and eye/face protection.                        |
| P260 | Do not breathe dust/gas/mist/vapours.                                  |
| P273 | Avoid release to the environment.                                      |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P270 | Do not eat, drink or smoke when using this product.                    |
| P264 | Wash with plenty of water and soap thoroughly after handling.          |

Precautionary Statements (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. |
| P310               | Immediately call a POISON CENTER or doctor/physician.                                                                            |
| P303 + P362        | IF ON SKIN (or hair): Wash with plenty of soap and water.                                                                        |
| P330               | Rinse mouth.                                                                                                                     |
| P362 + P364        | Take off contaminated clothing and wash it before reuse.                                                                         |

Precautionary Statements (Disposal):

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

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

Hazard determining component(s) for labelling: 2-Propen-1-one, 1-(4-morpholinyl)-, diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, 4-(1,1-Dimethylethyl)cyclohexyl acrylate, (Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate

### 2.3. Other hazards

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

No specific dangers known, if the regulations/notes for storage and handling are considered.

## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Chemical nature

Preparation based on: urethane, acrylates, Polymer

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

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

Content (W/W):  $\geq 1\%$  -  $< 3\%$

CAS Number: 75980-60-8

EC-Number: 278-355-8

Skin Sens. 1B

Repr. 2 (fertility)

Repr. 2 (unborn child)

Aquatic Chronic 2

H317, H361fd, H411

4-(1,1-Dimethylethyl)cyclohexyl acrylate

Content (W/W):  $\geq 1\%$  -  $< 3\%$

CAS Number: 84100-23-2

EC-Number: 282-104-8

REACH registration number: 01-

2120735441-62

INDEX-Number: 607-133-00-9

Skin Corr./Irrit. 2

Eye Dam./Irrit. 2

Skin Sens. 1A

STOT SE 3 (irr. to respiratory syst.)

Aquatic Acute 1

Aquatic Chronic 2

M-factor acute: 1

H319, H315, H317, H335, H411, H400

2-Propen-1-one, 1-(4-morpholinyl)-

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|                                       |                        |
|---------------------------------------|------------------------|
| Content (W/W): $\geq 50\%$ - $< 75\%$ | Acute Tox. 4 (oral)    |
| CAS Number: 5117-12-4                 | Eye Dam./Irrit. 1      |
| EC-Number: 418-140-1                  | Skin Sens. 1           |
| INDEX-Number: 613-222-00-3            | STOT RE 2              |
|                                       | H318, H302, H317, H373 |

(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| Content (W/W): $\geq 5\%$ - $< 7\%$ | Skin Corr./Irrit. 2                   |
| CAS Number: 42594-17-2              | Eye Dam./Irrit. 2                     |
| EC-Number: 255-901-3                | STOT SE 3 (irr. to respiratory syst.) |
| INDEX-Number: 607-133-00-9          | Aquatic Chronic 2                     |
|                                     | H319, H315, H335, H411                |

Specific concentration limit:STOT SE 3:  $\geq 10\%$ 

Polymeric urethane acrylate

|                                       |                     |
|---------------------------------------|---------------------|
| Content (W/W): $\geq 25\%$ - $< 50\%$ | Skin Corr./Irrit. 2 |
| CAS Number: 52404-33-8                | Eye Dam./Irrit. 2   |
|                                       | H319, H315          |

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:

Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting unless told to by a poison control center or doctor.

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

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.

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## **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.

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## **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.

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## 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

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

Protect from temperatures below: 0 °C

Protect from temperatures above: 40 °C

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## 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.

Eye protection:

Tightly fitting safety goggles (cage goggles) (e.g. EN 166) and face shield.

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

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment.

## SECTION 9: Physical and Chemical Properties

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

|                                      |                                                                                                                               |                            |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| Form:                                | liquid                                                                                                                        |                            |
| Colour:                              | black                                                                                                                         |                            |
| Odour:                               | acrylic-like                                                                                                                  |                            |
| Odour threshold:                     | No data available.                                                                                                            |                            |
| pH value:                            | 7                                                                                                                             |                            |
| Freezing point:                      | not determined                                                                                                                |                            |
| boiling temperature:                 | > 100 °C<br>(1,013 hPa)                                                                                                       |                            |
| Flash point:                         | > 100 °C                                                                                                                      |                            |
| Evaporation rate:                    | not determined                                                                                                                |                            |
| Flammability:                        |                                                                                                                               | (derived from flash point) |
| Lower explosion limit:               | not determined                                                                                                                |                            |
|                                      | For liquids not relevant for classification and labelling., The lower explosion point may be 5 - 15 °C below the flash point. |                            |
| Upper explosion limit:               |                                                                                                                               | (DIN 51649-1)              |
|                                      | not determined                                                                                                                |                            |
|                                      | For liquids not relevant for classification and labelling.                                                                    |                            |
| Ignition temperature:                | not determined                                                                                                                |                            |
| Vapour pressure:                     | not determined                                                                                                                |                            |
| Density:                             | 1.09 g/cm <sup>3</sup><br>(55 °C)<br>1.12 g/cm <sup>3</sup><br>(20 °C)                                                        |                            |
| Relative density:                    | No data available.                                                                                                            |                            |
| Relative vapour density (air):       | not determined                                                                                                                |                            |
| Solubility in water:                 | sparingly soluble                                                                                                             |                            |
| Solubility (qualitative) solvent(s): | organic solvents<br>soluble                                                                                                   |                            |

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

Self ignition: not self-igniting

Thermal decomposition: 195 °C, 300 - < 400 kJ/kg,

Viscosity, dynamic: approx. 300 mPa.s

(20 °C)

100 mPa.s

(50 °C)

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

## 9.2. Other information

Surface tension:

No data available.

Grain size distribution: The substance / product is marketed or used in a non solid or granular form.

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## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

### 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:

No substances known that should be avoided.

### 10.6. Hazardous decomposition products

Hazardous decomposition products:

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

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## SECTION 11: Toxicological Information

### 11.1. Information on toxicological effects

Acute toxicity

Experimental/calculated data:

ATE (oral): approx. 1,000 mg/kg

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

Irritation

Experimental/calculated data:

Skin corrosion/irritation rabbit: Irritant. (BASF-Test)

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

Serious eye damage/irritation rabbit: irreversible damage (BASF-Test)

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

Respiratory/Skin sensitization

Experimental/calculated data:

Guinea pig maximization test guinea pig: skin sensitizing (OECD Guideline 406)

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

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.

Reproductive toxicity

Assessment of reproduction toxicity:

Based on the ingredients, there is no suspicion of a toxic effect on reproduction.

Developmental toxicity

Assessment of teratogenicity:

Based on the ingredients, there is no suspicion of a teratogenic effect.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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

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

Assessment of repeated dose toxicity:  
Repeated oral exposure may affect certain organs.

#### Aspiration hazard

No aspiration hazard expected.

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## **SECTION 12: Ecological Information**

### **12.1. Toxicity**

Assessment of aquatic toxicity:  
Acutely harmful 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.

Toxicity to fish:  
LC50 (96 h) > 1 - 10 mg/l, *Leuciscus idus*  
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aquatic invertebrates:  
No data available.

Aquatic plants:  
No observed effect concentration (72 h) 10 - 100 mg/l (growth rate), *Scenedesmus subspicatus* (Guideline 92/69/EEC, C.3, static)  
The product has not been tested. The statement has been derived from the properties of the individual components.

Microorganisms/Effect on activated sludge:  
The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Chronic toxicity to fish:  
No data available regarding toxicity to fish.

Chronic toxicity to aquatic invertebrates:  
No data available regarding toxicity to daphnids.

Assessment of terrestrial toxicity:

No data available concerning terrestrial toxicity.

## **12.2. Persistence and degradability**

Assessment biodegradation and elimination (H<sub>2</sub>O):  
Poorly biodegradable.

## **12.3. Bioaccumulative potential**

Assessment bioaccumulation potential:  
The product has not been tested.

## **12.4. Mobility in soil**

Assessment transport between environmental compartments:  
Volatility: No data available.

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

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): 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**

No data available.

## **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:  
Acutely harmful for aquatic organisms.

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# **SECTION 13: Disposal Considerations**

## **13.1. Waste treatment methods**

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.

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## SECTION 14: Transport Information

### Land transport

#### ADR

|                               |                                                                |
|-------------------------------|----------------------------------------------------------------|
|                               | Not classified as a dangerous good under transport regulations |
| UN number:                    | Not applicable                                                 |
| UN proper shipping name:      | Not applicable                                                 |
| Transport hazard class(es):   | Not applicable                                                 |
| Packing group:                | Not applicable                                                 |
| Environmental hazards:        | Not applicable                                                 |
| Special precautions for user: | None known                                                     |

#### RID

|                               |                                                                |
|-------------------------------|----------------------------------------------------------------|
|                               | Not classified as a dangerous good under transport regulations |
| UN number:                    | Not applicable                                                 |
| UN proper shipping name:      | Not applicable                                                 |
| Transport hazard class(es):   | Not applicable                                                 |
| Packing group:                | Not applicable                                                 |
| Environmental hazards:        | Not applicable                                                 |
| Special precautions for user: | None known                                                     |

### Inland waterway transport

#### ADN

|                               |                                                                |
|-------------------------------|----------------------------------------------------------------|
|                               | Not classified as a dangerous good under transport regulations |
| UN number:                    | Not applicable                                                 |
| UN proper shipping name:      | Not applicable                                                 |
| Transport hazard class(es):   | Not applicable                                                 |
| Packing group:                | Not applicable                                                 |
| Environmental hazards:        | Not applicable                                                 |
| Special precautions for user: | None known                                                     |

#### Transport in inland waterway vessel

Not evaluated

### Sea transport

#### IMDG

|                          |                                                                |
|--------------------------|----------------------------------------------------------------|
|                          | Not classified as a dangerous good under transport regulations |
| UN number:               | Not applicable                                                 |
| UN proper shipping name: | Not applicable                                                 |

|                              |                |
|------------------------------|----------------|
| Transport hazard class(es):  | Not applicable |
| Packing group:               | Not applicable |
| Environmental hazards:       | Not applicable |
| Special precautions for user | None known     |

**Air transport****IATA/ICAO**

|                              |                                                                |
|------------------------------|----------------------------------------------------------------|
|                              | Not classified as a dangerous good under transport regulations |
| UN number:                   | Not applicable                                                 |
| UN proper shipping name:     | Not applicable                                                 |
| Transport hazard class(es):  | Not applicable                                                 |
| Packing group:               | Not applicable                                                 |
| Environmental hazards:       | Not applicable                                                 |
| 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.

**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

## SECTION 16: Other Information

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

|                   |                                                                          |
|-------------------|--------------------------------------------------------------------------|
| Acute Tox.        | Acute toxicity                                                           |
| Skin Corr./Irrit. | Skin corrosion/irritation                                                |
| Eye Dam./Irrit.   | Serious eye damage/eye irritation                                        |
| Skin Sens.        | Skin sensitization                                                       |
| STOT RE           | Specific target organ toxicity — repeated exposure                       |
| Aquatic Chronic   | Hazardous to the aquatic environment - chronic                           |
| Repr.             | Reproductive toxicity                                                    |
| STOT SE           | Specific target organ toxicity — single exposure                         |
| Aquatic Acute     | Hazardous to the aquatic environment - acute                             |
| H318              | Causes serious eye damage.                                               |
| H315              | Causes skin irritation.                                                  |
| H302              | Harmful if swallowed.                                                    |
| H317              | May cause an allergic skin reaction.                                     |
| H373              | May cause damage to organs through prolonged or repeated oral exposure.  |
| H412              | Harmful to aquatic life with long lasting effects.                       |
| H361fd            | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| H411              | Toxic to aquatic life with long lasting effects.                         |
| H319              | Causes serious eye irritation.                                           |
| H335              | May cause respiratory irritation.                                        |
| H400              | Very toxic to aquatic life.                                              |
| H373              | May cause damage to organs ( ) through prolonged or repeated exposure.   |

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.