

Safety Data Sheet

Ultracur3D® EL 4000

Revision date : 2024/08/23

Version: 4.0

Page: 1/12

(30794255/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Ultracur3D® EL 4000

Recommended use of the chemical and restriction on use

Recommended use*: reactive diluent; 3D Printing; Printing inks

Unsuitable for use: Any other use is not compliant.

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: Blend based on: acrylic resin

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Acute Tox.	4 (oral)	Acute toxicity
Skin Corr./Irrit.	2	Skin corrosion/irritation
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
Skin Sens.	1	Skin sensitization
Repr.	1B (fertility)	Reproductive toxicity
Repr.	1B (unborn child)	Reproductive toxicity

Safety Data Sheet

Ultracur3D® EL 4000

Revision date: 2024/08/23
Version: 4.0

Page: 2/12
(30794255/SDS_GEN_US/EN)

STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure
Aquatic Acute	3	Hazardous to the aquatic environment - acute
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic

Label elements

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.
H335	May cause respiratory irritation.
H360	May damage fertility. May damage the unborn child.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.
P261	Avoid breathing mist or vapour or spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
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 contaminated body parts 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 physician.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P308 + P313	IF exposed or concerned: Get medical attention.
P330	Rinse mouth.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Storage):

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents/container in accordance with local regulations.
------	---

Safety Data Sheet

Ultracur3D® EL 4000

Revision date: 2024/08/23
Version: 4.0

Page: 3/12
(30794255/SDS_GEN_US/EN)

Hazards not otherwise classified

No applicable information available.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Heteromonocycle, alkenyl alkyl

CAS Number: Trade Secret
Content (W/W): ≥ 25.0 - $< 50.0\%$
Synonym: No data available.

Proprietary acrylate

CAS Number: Trade Secret
Content (W/W): ≥ 10.0 - $< 15.0\%$
Synonym: No data available.

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

CAS Number: 75980-60-8
Content (W/W): ≥ 1.0 - $< 3.0\%$
Synonym: Diphenyl(2,4,6-trimethylbenzoyl)phosphineoxide

4. First-Aid Measures

Description of first aid measures

General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

If on skin:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

If in eyes:

Contact lenses should be removed. Hold eyelids open and flush with copious amounts of clean, fresh water or a special eyewash solution and seek medical advice.

If swallowed:

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

Do not induce vomiting.

Most important symptoms and effects, both acute and delayed

Safety Data Sheet

Ultracur3D® EL 4000

Revision date: 2024/08/23
Version: 4.0

Page: 4/12
(30794255/SDS_GEN_US/EN)

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Information on: Heteromonocycle, alkenyl alkyl

Symptoms: Overexposure may cause:; corneal injury, skin corrosion, severe pain, coughing, respiratory disorders, dyspnea, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps, Inhalation may provoke the following symptoms:; irritation of respiratory tract

Information on: Proprietary acrylate

Symptoms: Overexposure may cause:; Eye irritation, skin irritation, erythema, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps, Inhalation may provoke the following symptoms:; irritation of respiratory tract, coughing

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

Symptoms: Overexposure may cause:; allergic contact dermatitis, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps

Indication of any immediate medical attention and special treatment needed

Note to physician

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

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
harmful vapours, carbon oxides, nitrogen oxides
Generation of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

If exposed to fire, keep containers cool by spraying with water. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Safety Data Sheet

Ultracur3D® EL 4000

Revision date: 2024/08/23
Version: 4.0

Page: 5/12
(30794255/SDS_GEN_US/EN)

Do not breathe vapour/spray. Ensure adequate ventilation. Avoid contact with the skin, eyes and clothing. Use personal protective clothing.

Environmental precautions

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

Methods and material for containment and cleaning up

Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Avoid aerosol formation. Do not inhale vapours / aerosols. Avoid contact with the skin, eyes and clothing. Wear suitable protective clothing and gloves. Provide good ventilation of working area (local exhaust ventilation if necessary).

Protection against fire and explosion:

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

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Containers should be stored tightly sealed in a dry place. Keep container dry because product takes up the humidity of air. Protect against heat. Protect from the effects of light. The stabilizer is only effective in the presence of oxygen. Ensure adequate inhibitor and dissolved oxygen level.

Storage stability:

Storage temperature: -15 - 40 °C

Protect from temperatures below: -15 °C

Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure Controls/Personal Protection

No substance specific occupational exposure limits known.

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. A NIOSH-certified respirator with an APF of 10 is required.

Safety Data Sheet

Ultracur3D® EL 4000

Revision date: 2024/08/23
Version: 4.0

Page: 6/12
(30794255/SDS_GEN_US/EN)

Hand protection:

Wear chemically impervious protective gloves., Suitable materials for short-term contact (recommended: At least protective index 2, corresponding > 30 minutes of permeation time according to EN ISO 374-1), 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 (chemical goggles) and face shield.

Body protection:

Impermeable protective clothing

General safety and hygiene measures:

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. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. When using, do not eat, drink or smoke.

9. Physical and Chemical Properties

Form:	liquid
Odour:	acrylic-like
Odour threshold:	not determined
Colour:	colourless, clear
pH value:	7 (20 °C) substance/mixture is non-soluble (in water)
Melting temperature:	not determined
Boiling point:	not determined
Flash point:	> 94 °C
Flammability:	not highly flammable
Lower explosion limit:	not determined
Upper explosion limit:	not determined
Autoignition:	not determined
Vapour pressure:	not determined
Density:	1.0 g/cm ³ (20 °C)
Relative density:	approx. 1.03 (20 °C) No data available.
Vapour density:	not determined
Partitioning coefficient n-octanol/water (log Pow):	not applicable for mixtures
Self-ignition temperature:	not self-igniting
Thermal decomposition:	174.40 °C, 93.36 kJ/kg
Viscosity, dynamic:	102 mPa.s (30 °C)
Viscosity, kinematic:	not determined

Safety Data Sheet

Ultracur3D® EL 4000

Revision date: 2024/08/23
Version: 4.0

Page: 7/12
(30794255/SDS_GEN_US/EN)

Particle size:	The substance / product is marketed or used in a non solid or granular form.
Solubility in water:	sparingly soluble
Solubility (qualitative):	soluble
Evaporation rate:	solvent(s): organic solvents, not determined, Value can be approximated from Henry's Law
Other Information:	Constant or vapor pressure. If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Reactivity

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

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

not fire-propagating

Chemical stability

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

Possibility of hazardous reactions

The product is stabilized against spontaneous polymerization prior to despatch.

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.

Conditions to avoid

Avoid heat. Avoid UV-light and other radiation with high energy. Avoid direct sunlight. Avoid prolonged storage. Avoid inhibitor loss.

Incompatible materials

free radical initiators

Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

174.40 °C, 4 K/min

11. Toxicological information

Primary routes of exposure

Safety Data Sheet

Ultracur3D® EL 4000

Revision date: 2024/08/23
Version: 4.0

Page: 8/12
(30794255/SDS_GEN_US/EN)

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Of moderate toxicity after single ingestion.

Oral

Type of value: ATE

Value: 817 mg/kg

Information on: Heteromonocycle, alkenyl alkyl

Type of value: LD50

Species: rat (female)

Value: >300-<2000 mg/kg bw (OECD Guideline 423)

Inhalation

Type of value: ATE

Value: > 20 mg/l

Determined for vapor

Type of value: ATE

Value: > 5 mg/l

Determined for mist

Dermal

Type of value: ATE

Value: > 5,000 mg/kg

Assessment other acute effects

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

Irritation / corrosion

Assessment of irritating effects: Skin contact causes irritation. May cause severe damage to the eyes.

Information on: Heteromonocycle, alkenyl alkyl

Assessment of irritating effects: May cause severe damage to the eyes. Causes skin irritation.

Information on: Proprietary acrylate

Assessment of irritating effects: Not irritating to eyes and skin. The European Union (EU) has classified the substance as "irritating to skin and eyes".

Skin

Information on: Heteromonocycle, alkenyl alkyl

Species: In vitro assay

Result: Irritant.

Method: OECD Guideline 439

Safety Data Sheet

Ultracur3D® EL 4000

Revision date: 2024/08/23
Version: 4.0

Page: 9/12
(30794255/SDS_GEN_US/EN)

Information on: Proprietary acrylate
Species: In vitro assay
Result: non-irritant
Method: OECD Guideline 439

Eye

Information on: Heteromonocycle, alkenyl alkyl
Species: In vitro assay
Result: irreversible damage
Method: OECD Guideline 437

Sensitization

Assessment of sensitization: Sensitization after skin contact possible.

Information on: Proprietary acrylate
Assessment of sensitization:
Sensitization after skin contact possible.

Information on: diphenyl(2,4,6,-trimethylbenzoyl)phosphine oxide
Assessment of sensitization:
Caused skin sensitization in animal studies.

Information on: Proprietary acrylate
Mouse Local Lymph Node Assay (LLNA)
Species: mouse
Result: skin sensitizing
Method: OECD Guideline 429

Information on: diphenyl(2,4,6,-trimethylbenzoyl)phosphine oxide
Mouse Local Lymph Node Assay (LLNA)
Species: mouse
Result: skin sensitizing
Method: OECD Guideline 429

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

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.

Genetic toxicity

Assessment of mutagenicity: Based on available data, the classification criteria are not met.

Safety Data Sheet

Ultracur3D® EL 4000

Revision date: 2024/08/23
Version: 4.0

Page: 10/12
(30794255/SDS_GEN_US/EN)

Carcinogenicity

Assessment of carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity

Assessment of reproduction toxicity: May impair fertility. 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: Causes impairment of fertility in laboratory animals.

Teratogenicity

Assessment of teratogenicity: May cause harm to the unborn child. 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 teratogenicity: The substance caused malformations/developmental toxicity in laboratory animals.

Other Information

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

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

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. Acutely harmful for aquatic organisms.

Bioaccumulative potential

Assessment bioaccumulation potential

The product has not been tested.

Mobility in soil

Assessment transport between environmental compartments

No data available.

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.

Safety Data Sheet

Ultracur3D® EL 4000

Revision date: 2024/08/23
Version: 4.0

Page: 11/12
(30794255/SDS_GEN_US/EN)

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. Do not discharge into drains/surface waters/groundwater.

Container disposal:

Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Dispose of in accordance with national, state and local regulations.

14. Transport Information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released; restriction on use / listed

TSCA §5. Based on EPA's assessment that includes analogue data, a substance in this product has the potential to cause:

Specific target organ toxicity – Repeated Exposure.

Reproductive toxicity;

Hazard(s) not classifiable under GHS criteria.

TSCA § 5(a) final Significant New Use Restriction (SNUR)

A 12(b) export notification is required for substance(s) in this product subject to SNUR restrictions.

40 CFR 721.11343

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including TOLUENE, which is known to the state of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

NFPA Hazard codes:

Safety Data Sheet

Ultracur3D® EL 4000

Revision date: 2024/08/23
Version: 4.0

Page: 12/12
(30794255/SDS_GEN_US/EN)

Health: 3 Fire: 1 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2024/08/23

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

Ultracur3D® EL 4000 is a registered trademark of BASF Corporation or BASF SE
IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK. Any other intended applications should be discussed with the manufacturer.

END OF DATA SHEET