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1. Identification

Product identifier used on the label

Ultracur3D® RG 9400 B FR

Recommended use of the chemical and restriction on use

Recommended use*: 3D Printing Unsuitable for use: Uses other than recommended

* 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

<u>Company:</u> BASF 3D Printing Solutions GmbH Speyerer Str. 4 69115 Heidelberg, Germany Contact address: 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, additives

2. Hazards Identification

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

Classification of the product

Skin Corr./Irrit.	2	Skin corrosion/irritation		
Eye Dam./Irrit.	1	Serious eye damage/eye irritation		
Skin Sens.	1	Skin sensitization		
Aquatic Acute	2	Hazardous to the aquatic environment - acute		
Aquatic Chronic	2	Hazardous to the aquatic environment - chronic		

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Label elements



Signal Word: Danger

Hazard Statement: H318 H315 H317 H401 H411	Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.		
Precautionary Statemen	ts (Prevention):		
P280	Wear protective gloves and eye protection or face protection.		
P261	Avoid breathing mist or vapour or spray.		
P273	Avoid release to the environment.		
P272	Contaminated work clothing should not be allowed out of the workplace.		
P264	Wash contaminated body parts thoroughly after handling.		
Precautionary Statemen	ts (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.		
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.		
P362 + P364	Take off contaminated clothing and wash it before reuse.		
P391	Collect spillage.		
Precautionary Statements (Disposal):			
P501	Dispose of contents/container in accordance with local regulations.		

Hazards not otherwise classified

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.

3. Composition / Information on Ingredients

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

2-Propenoic acid, 1,1',1"-[(2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl] ester CAS Number: 40220-08-4 Content (W/W): >= 50.0 - < 75.0% Synonym: No data available.

Proprietary acrylate

CAS Number: Trade Secret Content (W/W): >= 20.0 - < 50.0% Synonym: No data available.

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11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6,16(or 4,6,6,16)-tetramethyl-10,15-dioxo-, 2-[(2methyl-1-oxo-2-propen-1-yl)oxy]ethyl ester CAS Number: 72869-86-4 Content (W/W): >= 7.0 - < 10.0% Synonym: No data available.

Phosphine oxide CAS Number: Trade Secret Content (W/W): >= 0.3 - < 1.0% Synonym: No data available.

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:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist. Remove contact lenses, if present. Immediate medical attention required.

If swallowed:

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

Most important symptoms and effects, both acute and delayed

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: Proprietary acrylate Symptoms: Overexposure may cause:, corneal injury, skin corrosion, severe pain, coughing, respiratory disorders, dyspnea, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps

Information on: 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

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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 Evolution 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

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

For large amounts: Dike spillage. Pump off product. For residues: Pick up with inert absorbent material (e.g. sand, earth etc.). Dispose of absorbed material in accordance with regulations.

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).

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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.

Protect from temperatures below: 0 °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:

Ensure adequate ventilation.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Respiratory protection in case of vapour/aerosol release. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Hand protection:

Chemical resistant protective gloves (EN ISO 374-1), 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 (splash goggles) (e.g. EN 166)

Body protection:

chemical-protection suit (f.e. according to EN 14605)

General safety and hygiene measures:

Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. 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.

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9. Physical and Chemical Properties

Form: Odour: Odour threshold: Colour: pH value:	liquid acrylic-like Not determined due to potential health haz black, opaque (20 °C) substance/mixture is non-soluble (in	zard by inhalation.
Freezing point: Boiling point: Flash point:	water) not determined > 100 °C > 100 °C	
Flammability:	not highly flammable	(derived from flash - and boiling point)
Lower explosion limit:	not determined	51-1
Upper explosion limit:	not determined	
Autoignition:	not determined	
Vapour pressure:	not determined	
Density:	1.1 g/cm3 (20 °C)	
Vapour density:	not determined	
Partitioning coefficient n- octanol/water (log Pow):	not applicable for mixtures	
Self-ignition temperature:	not self-igniting	
Thermal decomposition:	> 190 °C	
Viscosity, kinematic:	not determined	
Solubility in water:	sparingly soluble	
Solubility (qualitative):	soluble solvents,	
Evaporation rate:	not determined	

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.

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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: > 190 °C

11. Toxicological information

Primary routes of exposure

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: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

<u>Oral</u> Type of value: ATE Value: > 5,000 mg/kg

Inhalation Type of value: ATE Value: > 20 mg/l Determined for vapor

Type of value: ATE Value: > 5 mg/l Determined for mist

<u>Dermal</u> Type of value: ATE Value: > 5,000 mg/kg

<u>Assessment other acute effects</u> Assessment of STOT single: Based on available data, the classification criteria are not met.

Irritation / corrosion

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

<u>Skin</u>

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Information on: Proprietary acrylate Species: rabbit Result: Irritant. Method: OECD Guideline 404

Eye

Information on: 2-Propenoic acid, 1,1',1"-[(2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1ethanediyl] ester Information on: Proprietary acrylate Species: rabbit Result: Risk of serious damage to eyes. Method: OECD Guideline 405

<u>Sensitization</u> Assessment of sensitization: Sensitization after skin contact possible.

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

Information on: Phosphine oxide Guinea pig maximization test Species: guinea pig Result: sensitizing Method: OECD Guideline 406

Aspiration Hazard No aspiration hazard expected.

Chronic Toxicity/Effects

<u>Repeated dose toxicity</u> Assessment of repeated dose toxicity: Based on available data, the classification criteria are not met.

<u>Genetic toxicity</u> Assessment of mutagenicity: Based on available data, the classification criteria are not met.

<u>Carcinogenicity</u> Assessment of carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity

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

Teratogenicity

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

Other Information

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

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12. Ecological Information

Toxicity

Aquatic toxicity Assessment of aquatic toxicity: Toxic to aquatic life. Toxic to aquatic life with long lasting effects. The product has not been tested. The statement has been derived from the properties of the individual components.

Aquatic toxicity

Information on: 2-Propenoic acid, 1,1',1"-[(2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1ethanediyl] ester Assessment of aquatic toxicity: Acutely toxic for aquatic organisms. The chronic aquatic risk classification is based on acute aquatic toxicity study data and the environmental fate properties of the product.

Information on: 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6,16(or 4,6,6,16)-tetramethyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl ester Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. Toxic to aquatic organisms based on long-term (chronic) toxicity study data. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Persistence and degradability

Assessment biodegradation and elimination (H2O) Not readily biodegradable (by OECD criteria).

Assessment biodegradation and elimination (H2O)

Information on: 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6,16(or 4,6,6,16)-tetramethyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl ester

Not readily biodegradable (by OECD criteria). Moderately/partially biodegradable.

Elimination information

Information on: 2-Propenoic acid, 1,1',1"-[(2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1ethanediyl] ester 19.7 % BOD of the ThOD (28 d) (OECD 301F; ISO 9408; 92/69/EEC, C.4-D) (aerobic, activated sludge, domestic, non-adapted)

Bioaccumulative potential

Assessment bioaccumulation potential The product has not been tested.

Mobility in soil

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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:

The product has been assessed on the basis of the components' available data. To some extent data gaps exist for individual components. According to our present knowledge and experience dangers which are not covered by the current labeling are not to be expected. Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. Contact specialized companies about recycling.

Container disposal:

Dispose of in accordance with national, state and local regulations. Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Land transport USDOT Hazard class: Packing group: ID number: Hazard label: Proper shipping name:	9 III UN 3082 9, EHSM ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains (2,4,6-TRIOXO-1,3,5-TRIAZINE-1,3,5(2H,4H,6H)- TRIYL)TRI-2,1-ETHANEDIYL TRIACRYLATE, 7,7,9(OR 7,9,9)- TRIMETHYL-4,13-DIOXO-3,14-DIOXA-5,12-DIAZAHEXADECANE- 1,16-DIYL BISMETHACRYLATE) STABILIZED
Sea transport IMDG Hazard class: Packing group: ID number: Hazard label: Marine pollutant: Proper shipping name:	9 III UN 3082 9, EHSM YES ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains (2,4,6-TRIOXO-1,3,5-TRIAZINE-1,3,5(2H,4H,6H)- TRIYL)TRI-2,1-ETHANEDIYL TRIACRYLATE, 7,7,9(OR 7,9,9)- TRIMETHYL-4,13-DIOXO-3,14-DIOXA-5,12-DIAZAHEXADECANE- 1,16-DIYL BISMETHACRYLATE) STABILIZED

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Air transport

IATA/ICAO	
Hazard class:	9
Packing group:	
ID number:	UN 3082
Hazard label:	9, EHSM
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
	N.O.S. (contains (2,4,6-TRIOXO-1,3,5-TRIAZINE-1,3,5(2H,4H,6H)-
	TRIYL)TRI-2,1-ETHANEDIYL TRIACRYLATE, 7,7,9(OR 7,9,9)-
	TRIMETHYL-4,13-DIOXO-3,14-DIOXA-5,12-DIAZAHEXADECANE-
	1,16-DIYL BISMETHACRYLATE) STABILIZED

Further information

Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

15. Regulatory Information

Federal Regulations

Registration status:ChemicalTSCA, USreleased / listed

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

|--|

State RTK	CAS Number	Chemical name
PA	1333-86-4	carbon black

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

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

NFPA Hazard codes:

Health: 3 Fire: 1 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF 3D Printing NA Product Regulations SDS Prepared on: 2023/09/15

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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® RG 9400 B FR Any other intended applications should be discussed with the manufacturer.

END OF DATA SHEET