

SAFETY DATA SHEET Regulation (EC) No 1907/2006 (REACH)

(Revision: 7/25/2022; Supersedes: 5/22/2020)

Section 1 Identification of the Substance/Preparation and of the Company/Undertaking.

1.1 Product Identifier

Product Type: Photo Polymer

Trade Names: Vericast

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: For use in the Freeform Pico 3D printer. Uses Advised Against: For professional use only.

1.3 Details of the Supplier of the Substance or Mixture

Manufacturer: **Whip Mix Corporation** 361 Farmington Avenue Louisville, Kentucky, USA 40209

Emergency Telephone Number: (502) 634-1451

Fax Number: (502) 634-4512

EU Importer Whip Mix Europe GmbH Wißstrasse 26 - 28 **D - 44137 Dortmund**

Germany

+49 (0) 231 / 567 70 8-0

1.4 Emergency Telephone Number

Transportation Emergencies: CHEMTREC 1(800) 424-9300 (U.S. and Canada)

International Calls: 1-703-527-3887 (Collect calls accepted)

Other Product Information: Info@whipmix.com www.whipmix.com

Section 2 Hazard Identification.

2.1 Classification of the Mixture:

OSHA/WHMIS/GHS/CLP Classification (1272/2008):

Health Hazards	Physical Hazards	Environmental Hazards
Skin Sensitization Category 1 (H317)	Not Hazardous	Aquatic Chronic Hazard
Reproductive Toxicity Category 1B (H360FD)		Category 2 (H411)

2.2 Label Elements

Danger!







H317 May cause an allergic skin reaction.

H360 May damage fertility or the unborn child.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Phrases:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing mist, vapors or spray.

P272 Contaminated work clothing must not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves and protective clothing.

P303 + P313 IF exposed or concerned: Get medical advice.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P333 + P313 If skin irritation or rash occurs: Get medical attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents and container in accordance with local and national regulations.

2.3 Other Hazards: None

Section 3 Composition/Information on Ingredients.

<u>Substance</u>	CAS No. / EC Number	<u>%</u>	CLP/GHS Classification (1272/2008)
7,7,9(or 7,9,9)- trimethyl-4,13-dioxo- 3,14-dioxa-5,12- diazahexadecane- 1,16-diyl bismethacrylate	72869-86-4 / 276-957-5	10-25	Skin Sens. Cat. 1B H317 Aquatic Chronic Cat. 2 H411
Tetrahydrofurfuryl methacrylate	2455-24-5 / 219-529-5	10-20	Skin Sens. Cat. 1 H317 Repr. Cat. 1B H360D Aquatic Chronic Cat. 3 H412
Diphenyl(2,4,6- trimethylbenzoyl)phos phine oxide	75980-60-8 / 278-355-8	10-20	Skin Sens. Cat. 1 H317 Repr. Cat. 1B H360FD Aquatic Chronic Cat. 2 H411

See Section 16 for full text of GHS Classifications.

Section 4 First-Aid Measures.

4.1 Description of First Aid Measures

Inhalation: Remove exposed person to fresh air. Get medical attention if symptoms develop.

Eyes: Flush eyes with large quantities of water for several minutes, holding the eyelids apart. If irritation persists consult a physician.

Skin: Wash with large volumes of soap and water. Get medical attention if irritation persists or allergic reaction occurs.

Ingestion: Do NOT induce vomiting. If large amounts are swallowed, get medical attention.

- **4.2 Most Important symptoms and effects, both acute and delayed:** May cause mild eye irritation. Prolonged skin contact may cause irritation. May cause an allergic skin reaction. Inhalation of may cause mild respiratory irritation. May damage fertility or the unborn child.
- **4.3 Indication of any immediate medical attention and special treatment needed**: Immediate medical attention is not required.

Section 5 Fire-Fighting Measures.

- **5.1 Extinguishing Media:** Use media appropriate for the surrounding.
- **5.2 Special Hazards Arising from the Substance or Mixture:** Combustion may produce oxides of carbon, and phosphorus.
- **5.3 Advice for Fire-Fighters:** Firefighters should wear full emergency equipment and approved positive pressure self-contained breathing apparatus. Cool fire exposed containers with water.

Section 6 Accidental Release Measures.

- **6.1 Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate protective equipment. Avoid contact with eyes, skin and clothing.
- **6.2 Environmental Precautions:** Report releases as required by local and national authorities.
- 6.3 Methods and Material for Containment and Cleaning Up: Scoop or wipe up and place into a container for

disposal. Wash spill area with soap and water. Do not flush to sewer!

6.4 Reference to Other Sections: Refer to Section 8 for personal protective equipment and Section 13 for disposal information.

Section 7 Handling and Storage.

- **7.1 Precautions for Safe Handling**: Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Wash thoroughly after handling. Keep away from flames and sources of ignition.
- **7.2 Conditions for Safe Storage, Including any Incompatibilities**: Store in a cool, dry, well-ventilated location away from heat and other incompatible materials. Keep container tightly closed when not in use.

7.3 Specific end use(s):

Industrial uses: None identified **Professional uses:** Photo Polymer

Section 8 Exposure Controls/Personal Protection.

8.1 Control Parameters:

7,7,9(or 7,9,9)-trimethyl-4,13- dioxo-3,14-dioxa-5,12- diazahexadecane-1,16-diyl bismethacrylate	None Established
Tetrahydrofurfuryl methacrylate	None Established
Diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide	None Established

Refer to local regulations for exposure limits not listed above.

8.2 Exposure Controls:

Recommended Monitoring Procedures: Consult a safety professional for air monitoring.

Appropriate engineering controls: Use adequate general or local exhaust ventilation to maintain exposures below occupational exposure limits.

Personal Protective Measurers - Refer to EU Reg 2016/425

Respiratory protection: None normally required. If the exposure levels are excessive and irritation is experienced an approved dust/mist respirator appropriate for the form and concentration of the contaminants should be used. In the USA refer to OSHA regulations, in the EU refer to EN Standards (EN 149 or 405). Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial hygiene practice. **Skin protection:** Wear impervious gloves such as nitrile to prevent skin contact. In the EU refer to EN 374.

Eye protection: Chemical safety goggles should be worn if contact is possible. In the EU refer to EN 166.

Other: Protective clothing as required to avoid prolonged skin contact.

Section 9 Physical and Chemical Properties.

9.1 Information on basic Physical and Chemical Properties

Appearance: Red liquid
Physical State: Liquid
Odor: Characteristic

Odor threshold: No data available

Melting point/freezing point: No data available

Partition coefficient: n-octanol/water: No data

Flash point: >302°F (>150°C)

Flammability (solid, gas, liquid): No data available

Flammable limits: LEL: No data available Vapor pressure: No data available Relative density: No data available

UEL: No data available

pH: No data available

Boiling point: No data available

Evaporation rate: No data available

Relative Vapor density (air = 1): No data available Solubility In Water: Insoluble in water; soluble in

most organic solvents

Auto-ignition temperature: No data available

available

Decomposition temperature: No data available

Viscosity: ca. 400 mPa*s Oxidizing Properties: Not applicable **Explosive Properties:** Not applicable

Particle Characteristics: Not applicable

9.2 Other Information: None available

Section 10 Stability and Reactivity.

10.1 Reactivity: Not expected to react under normal conditions of use.

- 10.2 Chemical stability: Stable under normal conditions of use.
- 10.3 Possibility of hazardous reactions: None known.
- 10.4 Conditions to avoid: Avoid light.
- **10.5** Incompatible materials: Peroxides and other radical components.
- 10.6 Hazardous decomposition products: Thermal decomposition will produce oxides of carbon and unknown materials.

Section 11 Toxicological Information.

11.1 Information on Toxicological Effects:

Potential Health Effects:

Eyes: May cause mild irritation with redness and tearing.

Skin: Prolonged skin contact may cause irritation and drying of the skin. May cause allergic skin reaction.

Ingestion: Large amounts may cause gastrointestinal irritation and nausea.

Inhalation: Inhalation of mists may cause irritation of the eyes, nose and upper respiratory tract.

Chronic Health Effects: Suspected of damaging fertility or the unborn child.

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

7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate: Oral rat LD50

>5000 mg/kg, Dermal rat LD50>2000 mg/kg

Tetrahydrofurfuryl methacrylate: Oral rat LD50 3945 mg/kg

Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide: Oral rat LD50 >5000 mg/kg, Dermal rat LD50>2000 mg/kg

Skin corrosion/irritation: Based on available data, the classification criteria are not met... Eye damage/ irritation: Based on available data, the classification criteria are not met...

Respiratory Sensitization: Based on available data, the classification criteria are not met.

Skin Sensitization: 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate and Tetrahydrofurfuryl methacrylate were shown to cause sensitization.

Germ Cell Mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met. None of the components of this product are listed as carcinogens by OSHA, IARC or NTP or the EU CLP.

Reproductive Toxicity: Contains components that may damage fertility or the unborn child.

Specific Target Organ Toxicity:

Single Exposure: Based on available data, the classification criteria are not met.. Repeat Exposure: Based on available data, the classification criteria are not met.

Aspiration Toxicity: Based on available data, the classification criteria are not met.

11.2 Information on Other Hazards

11.2.1 Endocrine Disrupting Properties: None known

11.2.2 Other Information: None

Section 12 Ecological Data.

12.1 Ecotoxicity: Toxic to aquatic life with long lasting effects

,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate: 96 hr LC50 Danio rerio 10.1 mg/L. 48 hr EC50 Daphnia magna >1.2 mg/L

Tetrahydrofurfuryl methacrylate: 96 hr LC50 Pimephales promelas 34.7 mg/L, 48 hr EC50 Daphnia magna 97.3 mg/L, 72 hr EC50 Desmodesmus subspicatus 100 mg/L

Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide: 96 hr LC50 Cyprinus carpio 1.4 mg/L, 48 hr EC50 daphnia magna

- 3.53 mg/L, 72 hr EC50 Pseudokirchneriella subcapitata >2.01 mg/L
- 12.2 Persistence and degradability: No data available.
- **12.3 Bioaccumulative potential:** No data available.
- 12.4 Mobility in soil: No data available
- 12.5 Results of PBT and vPvB assessment: Components do not meet the criteria of PBT or vPvB.
- 12.6 Endocrine Disrupting Properties: None known
- 12.7 Other adverse effects: Not required.

Section 13 Disposal Considerations.

13.1 Waste Treatment Methods: Dispose in accordance with all national and local regulations.

Section 14 Transport Information.

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT	None	Not Regulated			
Canadian TDG (road and rail)	None	Not Regulated			
EU ADR/RID	UN3082	Environmentally Hazardous substance, Liquid, n.o.s. (trimethyl- 4,13-dioxo-3,14-dioxa- 5,12-diazahexadecane- 1,16-diyl bismethacrylate)	Class 9	III	Yes
IMDG	UN3082	Environmentally Hazardous substance, Liquid, n.o.s. ((trimethyl-4,13-dioxo- 3,14-dioxa-5,12- diazahexadecane-1,16- diyl bismethacrylate)	Class 9	III	Marine Pollutant
IATA/ICAO	UN3082	Environmentally Hazardous substance, Liquid, n.o.s. ((trimethyl-4,13-dioxo- 3,14-dioxa-5,12- diazahexadecane-1,16- diyl bismethacrylate)	Class 9	III	Yes

Note: Single packages or inner packagings with 5 liters or less can be shipped as unregulated,

14.6 Special precautions for User: Not applicable

14.7 Transport in Bulk According to IMO Instruments: Not applicable – product is transported only in packaged form.

Section 15 Regulatory Information.

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.

US Regulations

SARA Section 313 (40 CFR 372): This product contains the following toxic chemical(s) subject to reporting requirements of SARA 313: None

SARA Section 311/312 (40 CFR 370) Hazard Categories: Refer to Section 2 for the OSHA Hazard Classification.

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Toxic Substances Control Act (TSCA): All of the components of this product are listed on the TSCA inventory

California: This product contains the following substances known to the state of California to cause cancer and/or reproductive toxicity: None

International Chemical Inventories

Canadian Environmental Protection Act: All of the components of this product are listed on the Canadian Domestic Substances List (DSL) or has a quantity limitation.

15.2 Chemical safety assessment: None required

16. Other Information.

HMIS Rating: Health 2* Flammability 1 Reactivity 0

Hazard: 4-Severe; 3-Serious; 2-Moderate; 1-Slight; 0-Minimum

CLP/GHS Classification and H Phrases for Reference (See Section 3)

Skin Sens. Cat. 1 Skin Sensitization Category 1

Repr. Cat. 1B Reproductive Toxicity Category 1B

Aquatic Chronic Cat. 2 Aquatic Chronic Toxicity Category 2

Aquatic Chronic Cat. 3 Aquatic Chronic Toxicity Category 3

H317 May cause an allergic skin reaction.

H360 May damage fertility or the unborn child.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

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Date: July 25, 2022	Date: