Photopolymer Resin From ELEGOO

MATERIAL SAFETY DATA SHEET

Prepared: 08/02/2020

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS

Rev.04

Section 1. Product and Company Identification

Trade Name and/or synonyms: Photopolymer Resin
Recommended use: For use with 3D Printer, NOT for human use.
Manufacturer/Supplier:
Shenzhenshi guoyun dianzishangwu youxiangongsi

Address:Rm1111 Weidonglong Technology Building,Meilong Avenue,Longhua District,Shenzhen, China.

Section 2. Hazard(s) Identification

GHS Hazard Classification of the Substance or Mixture:

Signal Word: Warning
Signal Word: Danger
Hazard Statement(s):

H317 May cause an allergic skin reaction
H320 Causes eye irritation
H303 May be harmful if swallowed (uncured material only)
H335 May cause respiratory irritation (uncured material only)

Precautionary Statement(s):

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust or fume. (uncured material only)
P264 Wash thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing, eye protection and face protection.
P337+P313 If eye irritation persists: Get medical attention.
P302+P352 If skin contract: Wash with plenty of water and soap.
P333+P313 If skin irritation occurs: Get medical attention.
P501 Dispose of contents and container in accordance with local and national regulations.

Description of any other hazards classified: N/A

Section 3. Composition/Information on Ingredients		
Chemical Name, Common Name and Synonyms:	**CAS number**	**% by Weight**
Epoxy acrylate resin	61788-97-4	40-50%
Monomer	13048-33-4	20-40%
Color pigment		2-5%
Photoinitiators*	947-19-3	3-5%

Section 4. First-Aid Measures

Inhalation: In case of exposure to high concentration of vapor or mist, remove person to fresh air. Seek medical attention if any irritation develops.

Skin contact: Wash skin with soap and water. Remove any contaminated clothing and shoes and clean before reuse.Seek medical attention if irritation develops.

Eye contact: Hold eye open and rise continuously with a gentle stream of clean water for at least 15 minutes. Seek medical attention if any irritation develops.

Swallowing:First aid is unlikely to be required but if necessary, rinse mouth repeatedly with water, ensuring that the water is not swallowed. Seek medical attention.
Information for Doctors: Treat symptoms conventionally after thorough decontamination.

Section 5. Fire-Fighting Measures

E**xtinguishing media**:This product is not hypergolic, use carbon dioxide or dry chemical for small fires; aqueous foam or water spray for large fires.

Advice for fifirefighting: Wear full protective equipment(bunker gear) and self-contained breathing apparatus.(SCBA).

Unusual Fire & Explosion: Emits irritation vapors but liquid is not flammable once it is on fire.

Section 6. Accidental Release Measures

Personal precautions: Safety glasses with side shields, gloves and laboratory coat recommended.

Environmental precautions: Avoid releases to the environment. Report releases as required by local and national authorities.

Method of cleaning up: Exposure to sunlight or artificial light will cause the resin to polymerize. Spread the paste to maximize the surface area. Once the material is hard, pick up and place into a container for disposal.

Section 7. Handling and Storage

Precautions for safe handling: Avoid contact with the eyes, skin and clothing. Avoid breathing dust or fumes. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.Do not reuse containers. Empty containers retain product residues and can be hazardous.Follow all SDS precautions when handling empty containers.

Conditions for safe storage: Store in a tightly closed container in a cool (29-90°F/-1.7-32.2°C),well-ventilated location away from incompatible materials. Do not store near high temperatures, light or ignition sources. Do not store in an oxygen-free environment. Avoid freezing the material.

Section 8. Exposure Controls / Personal Protection

Control parameters: Use in an enclosed process area is recommended.
Personal protective equipment: Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. Eye protection such as chemical splash goggles and/or face shield must be worn when the possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapor.
General protective and hygienic measure: Wash hands after handling material and before eating.See section 7 for full protective measures.
Breathing Equipment: None should be needed from normal use.If this material is handled at elevated temperature or under mist forming conditions, approved respiratory protection equipment should be used. Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial hygiene practice.
Protection of hands: Gloves are recommended.Depending on the condition so fuse, lab coat and/or arm shields may be used.
Material of gloves, Penetration time of glove material: N/D
Eye protection: Use of safety goggles with side shields is recommended.

Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties.

Appearance
Form: Colored Liquid
Color: Colored, or having an intentionally added pigmented color.
Odor: Ester-like odor.
Odor Threshold: N/D
pH value at 20°C (68°F): N/D

Change in condition
Melting point/Melting range: N/D
Boiling point/Boiling range: N/D
Flash point:> > 70℃
Flammability (solid, gaseous): N/D
Ignition Temperature: > 450℃
Decomposition temperature: N/D Auto igniting: N/D
Danger of explosion: N/D
Explosion limits: N/D
Lower: N/D
Upper: N/D

Vapor Pressure at 20oC(68oF): N/D
Density at 20oC (68oF): N/D
Relative density: N/D
Vapor Density: N/D
Evaporation rate: N/D
Miscibility with Water: Nearly insoluble in water.
Viscosity: 150-400 cps at 25C/77F
Solvent content: N/D
Organic solvents: N/D
Water: N/D
Solids content: N/D
Other information:
Specific Gravity:1.10-1.125 at 25C/77F

Section 10. Stability and Reactivity

Reactivity: None known.
Chemical Stability: Stable if handled and stored as directed.
Thermal decomposition/Conditions to avoid: Avoid heat, light and sources of contamination.
Possibility of hazardous reactions/Conditions to avoid: Heat,light, sources of contamination or inhibitor depletion may cause spontaneous polymerization generating heat and pressure.Closed containers may rupture or explode during run away polymerization.
Incompatible materials: Reducing and oxidizing agents, peroxides and amines.
Hazardous decomposition products: Thermal decomposition may release acrid smoke or fumes, carbon and nitrogen oxides.

Section 11. Toxicological Information

Acute toxicity: Possible irritant. See section 2.
Primary irritant effect: See Section2 for possible skin and eye irritation and sensitization.
LD/LC50 values that are relevant for classification:N/D
Additional toxicological information: N/D
IARC (International Agency for Research on Cancer) None of the components are listed.
NTP (National Toxicology Program) None of the components are listed.

Section 12. Ecological Information

Aquatic Toxicity: None of the components are listed.
Persistence and degrade ability: No data is currently available.
Behavior in environmental systems:No data is currently available.
Bio accumulative potential: No data is currently available.
Mobility in Soil: No data is currently available.
Additional ecological information: No additional data is available.
General Notes: Release into the environment should be avoided. Refer to section 13 for disposal information.
Results of PBT and vPvB assessment: N/D
Other adverse effects: None know.

Section 13. Disposal Considerations

Waste Treatment Methods
Recommendation: Cure material before disposal. Dispose in accordance with all federal, state and local regulations. Consult state and local hazardous waste regulations to ensure complete and accurate classification of waste. US EPA guidelines for the classification of hazardous waste are found in 40 CFR part 261.3.
Uncleaned packaging
Recommendation: Rinse with alcohol. Contain and dispose of rinse material according to all federal, state and local regulations.
Recommended cleansing agent: alcohol

Section 14. Transport Information

14.1 UN Number
ADR/RID: 3082 **IMDG:** UN3082 **IATA:** UN3082

14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,LIQUID,N.O.S. (contains bisphenol A epoxy diacrylate)

14.3 Transport hazard classes:
ADR/RID :9 **IMDG:**9 **IATA:**9

14.4 Packaging group
ADR/RID: III **IMDG:** III **IATA:**III

14.5 Environmental hazards
ADR/RID: Not Applicable **IMDG:** Not Applicable **IATA:** Not Applicable

14.6 Packaging method: Please refer to the seventh section

Section 15. Regulatory Information

The following provides a summary of the legal requirements.

Ingredient	EPA* TSCA	CA Prop 65	EUROPEAN ECONOMIC COMMUNITY (EEC) EINECS	European Community Standards	Listed as dangerous chemicals per ESIS	EEC Symbol	CANADA REGS DSL	NDSL
A. Methacrylated oligomers	Yes	No	Yes	None	No	Xi; Irritant, R36/37/38, R43 S3,S7/9, S20, S26, S29, S37/39	Yes	Yes
B. Methacrylated monomer	Yes	No	Yes	None	No	Xi; Irritant, R36/37/38, R43 S3,S7/9, S20, S26, S29, S37/39	Yes	Yes
C. Photoinitiator(s)	Yes	No	Yes	None	No	H303, H402	Yes	No

All the components present in this product at concentrations equal to or greater than 0.1% are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Substance Preparation Classification:

Irritant

FULL TEXT OF ANY R-PHRASES AND S-PHRASES:
Risk Phrases:
R36/37/38 -- Irritating to eyes, respiratory system and skin
R43 -- May cause sensitization by skin contact
Safety Phrases:
S3 -- Keep in a cool place S7/9 -- Keep container
S20 – When using do not eat or drink
S26 -- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S29 – Do not empty into drains
S36 -- Wear suitable protective clothing
S37/39 -- Wear suitable gloves and eye/face protection
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
Pursuant to Title III of the Superfund Amendments and Re-authorization Act of 1986, (SARA) and 40 CFR 372 Part 372, this product does not contain chemicals subject to the reporting requirements under Section 313.
California Proposition 65: This product does not contain chemicals which are known to the state of California to cause cancer.

Section 16. Other Information

Abbreviations and Acronyms: None**.**
Other information not contained elsewhere: None**.**
HMIS (Hazardous Materials Information System)Rating 0-4:

HEALTH	**1**
FIRE HAZARD	**1**
REACTIVITY	**1**