

SDS Service Summary No.: CANEC24000105401 Date: 11 Jan 2024 Page 1 of 1

SGS Job No. : SZP24-000166

Product Name : ABS-Like Photopolymer Resin

Manufacturer / Supplier SHENZHEN ELEGOO TECHNOLOGY CO., LTD.

Composition/Ingredient of product

(as per applicant submission)

See section 3 Composition/information on ingredients on the SDS

Job Receiving Date : 02 Jan 2024

SDS Preparation Period : 02 Jan 2024-08 Jan 2024

Service Requested : Preparation of Safety Data Sheet (SDS) for the product with submitted

information, with calculation of the classification and labeling requirement

according to the submitted composition and European Commission

Regulation (EC) No 1272/2008.

Summary As per request, the contents and formats of the SDS are prepared in

> accordance with European Commission Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 and Regulation (EU) No 2020/878, and is

provided per attached.

Disclaimer

This Safety Data Sheet (SDS) is provided to applicant to fulfill European Commission Regulation (EC) No 1907/2006 and communicate the hazard information of chemicals through the supply chain to ensure safe use. It is not a test report or a certificate ensuring the safety of a product.

SGS has consolidated product information based on documents provided by Applicant (i.e. product name, the supplier details, product composition, available physical data, etc.) without independent verification from SGS. The information is provided without any warranty, express or implied, regarding its correctness.

Jany Zhong

Project Engineer

Janny Zhong

Printing date: 10.01.2024 Version number: 1 Revision date: 08.01.2024

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

- · 1.1 Product identifier
- · Trade name: ABS-Like Photopolymer Resin
- · **UFI:** FUF0-W035-V005-GCHH
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the mixture: 3D Printing
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer / Supplier: SHENZHEN ELEGOO TECHNOLOGY CO., LTD.
- · Full address:

101, NO. 30, DAHE INDUSTRIAL ZONE, GUANCHENG COMMUNITY, GUANHU STREET, LONGHUA DISTRICT, SHENZHEN, CHINA

- · Phone number: 0755-21005141
- · Email: INFO@ELEGOO.COM
- · Only Representative / other EU contact point: Not available
- · 1.4 Emergency telephone number:

IRELAND

National Poisons Information Centre

Tel: +353 (01) 809 2566 (For healthcare professionals)

+353 (01) 809 2166 (For public; 8am - 10pm)

· 1.5 Reference Number: CANEC24000105401,SZP24-000166

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H335 May cause respiratory irritation.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of Regulation (EC) No.1272/2008.

· Classification system:

The classification is according to the latest edition of EU Regulation (EC) No. 1272/2008, and extended by company and literature data.

- · 2.2 Label elements
- $\cdot \textit{Labelling according to Regulation (EC) No.~1272/2008}$

The product is classified and labelled according to the CLP regulation.

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Safety data sheet Regulation (EC) 1907/2006 and 1272/2008

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Trade name: ABS-Like Photopolymer Resin

· Hazard pictograms







GHS05

05 GHS07

07 GHS09

· Signal word Danger

· Hazard-determining components of labelling:

2-Oxepanone, polymer with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-hydroxyethyl acrylate-blocked

(5-ethyl-1,3-dioxan-5-yl)methyl acrylate

Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate

· Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

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/doctor.

P321 Specific treatment (see on this label).

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

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Additional information:

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist

· 2.3 Other hazards:

- · Results of PBT and vPvB assessment
- · PBT: Not applicable
- · vPvB: Not applicable
- · Determination of endocrine-disrupting properties Not applicable

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description:

Mixture of the substances listed below with nonhazardous additions.

For the wording of the listed hazard statements refer to section 16.

· Composition:

CAS: 66492-51-1 (5-ethyl-1,3-dioxan-5-yl)methyl acrylate 45%

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CAS: 84170-74-1	(Contd. from Poly[oxy(methyl-1,2-ethanediyl)], α,α' -(2,2-dimethyl-1,3-propanediyl) bis[ω -[(1-oxo-2-propen-1-yl)oxy]-	28%
CAS: 68987-79-1	2-Oxepanone, polymer with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-hydroxyethyl acrylate-blocked Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	20%
CAS: 84434-11-7 EINECS: 282-810-6	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate Aquatic Chronic 2, H411; Skin Sens. 1B, H317	5%
CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2	Titanium dioxide © Carc. 2, H351	1.5%
CAS: 1333-86-4 EINECS: 215-609-9	Carbon black Substance with a Union workplace exposure limit	0.5%

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General description:

Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.

· After inhalation:

Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth artificial respiration if victim ingested or inhaled the substance. If not breathing, give cardiopulmonary resuscitation and consult a physician immediately.

· After skin contact:

ake off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feeling uncomfortable.

· After eye contact:

In case of contact may cause irritation, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician immediately if eyes are hurt.

· After swallowing:

Do not induce vomiting. Never feed anything into the mouth of an unconscious person. Call a physician or Poison Control Center immediately.

· 4.2 Most important symptoms and effects, both acute and delayed:

No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture: No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures: Wear protective equipment. Keep unprotected persons away.

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· 6.2 Environmental precautions:

Do not allow product to reach sewage system or any water sourse.

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

For the general occupational hygienic measures refer to Section 8.

- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from water.

- · Further information about storage conditions: Keep container tightly sealed.
- · 7.3 Specific end use(s): No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:				
CAS: 13463-67-7 Titanium dioxide (1.5%)				
AGW (Germany)	Long-term value: 1.25* 10** mg/m³ 2(II);*alveolengängig**einatembar; AGS, DFG, Y			
VLEP (France)	Long-term value: 10 mg/m³ C2			
OEL (Ireland)	Long-term value: 10* 4** mg/m³ *total inhalable **respirable dust			
CAS: 1333-86-4 Carbon black (0.5%)				
VLEP (France)	Long-term value: 3.5 mg/m³			
OEL (Ireland)	Long-term value: 3* mg/m³ *inhalable fraction			

· Regulatory information

AGW (Germany): TRGS 900 VLEP (France): ED 1487 05.2021

OEL (Ireland): 2021 CoP for the Safety, Health and Welfare at Work

· **DNELs:** Not available · **PNECs:** Not available

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• Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure.

· Appropriate engineering controls:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Avoid contact with the skin.

Avoid contact with the eyes and skin.

See Section 7 for information about design of technical facilities.

· Individual protection measures, such as personal protective equipment

· Respiratory protection:

If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.

· Hand protection:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Wear protective gloves (such as butyl rubber), passing the tests according to EN 374(EU), US F739 or AS/NZS 2161.1 standard.

· Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- · Eye/face protection: Wear protective goggle (Conform to EC EN 166 or US-NIOSH).
- · Body protection: Protective work clothing
- · Thermal hazards: Not required for normal conditions of use.
- · Environmental exposure controls:

Control measures must be made in accordance with Community environmental protection legislation.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

Physical state:Colour:LiquidGrey

· Odour: It is considered mildly irritating.

• Odour threshold: Not available • Melting point/Freezing point: -60 °C

· Boiling point or initial boiling point and boiling

range: 140 °C • Flammability: Not available

· Lower and upper explosion limit

· Lower: Not available · Upper: Not available

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· Flash point:	>250 °C
· Auto-ignition temperature:	>450 °C
· Decomposition temperature:	>250 °C
· pH:	6.8-7.2
Vigagity	

· Viscosity

Kinematic viscosity: Not available
Dynamic viscosity at 25 °C: 200-400 mPas

· Solubility

Water: Not available
 Partition coefficient n-octanol/water (log value): Not available
 Vapour pressure: <0.01 mmHg

· Density and/or relative density

Density: Not available
Relative density at 25 °C: 1.05
Relative vapour density: Not available
Particle characteristics: Not available

· 9.2 Other information

· Appearance

· Form: Liquid

· Information with regard to physical hazard classes

Not applicable · Explosives: · Flammable gases: Not applicable Not applicable · Aerosols: Not applicable · Oxidising gases: Not applicable · Gases under pressure: · Flammable liquids: Not applicable · Flammable solids: Not applicable · Self-reactive substances and mixtures: Not applicable · Pyrophoric liquids: Not applicable · Pyrophoric solids: Not applicable Not applicable · Self-heating substances and mixtures:

· Substances and mixtures, which emit flammable

gases in contact with water:

Oxidising liquids:
Oxidising solids:
Organic peroxides:
Corrosive to metals:
Obsensitised explosives:
Other safety characteristics:

Not applicable
Not applicable
Not applicable
Not applicable

SECTION 10: Stability and reactivity

- · 10.1 Reactivity: No further relevant information available.
- · 10.2 Chemical stability: Stable under recommended storage and handling conditions
- · 10.3 Possibility of hazardous reactions: No dangerous reactions known.
- · 10.4 Conditions to avoid: Humidity, sunlight, high temperature
- · 10.5 Incompatible materials: Strong oxide, acid and alkali, Strong reducing agent
- · 10.6 Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity

. I D/I C50	งสโนอร	relevant	for c	lassification:

CAS: 13463-67-7 Titanium dioxide

 Oral
 LD50
 >20,000 mg/kg (rat)

 Dermal
 LD50
 >10,000 mg/kg (rabbit)

CAS: 1333-86-4 Carbon black

Oral LD50 10,000 mg/kg (rat)

- · Skin corrosion/irritation: Causes skin irritation.
- · Serious eye damage/irritation: Causes serious eye damage.
- · Respiratory or skin sensitization: May cause an allergic skin reaction.
- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- · STOT-single exposure: May cause respiratory irritation.
- · STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties:

None of the ingredients is listed.

· Other information: No further relevant information available.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability: No further relevant information available.
- · 12.3 Bioaccumulative potential: No further relevant information available.
- · 12.4 Mobility in soil: No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable
- · vPvB: Not applicable
- · 12.6 Endocrine disrupting properties:

The product does not contain substances with endocrine disrupting properties.

· 12.7 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

EH

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14.1 UN number or ID number ADR/RID/ADN, IMDG, IATA	UN3082			
14.2 UN proper shipping name ADR/RID/ADN, IATA IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, N.O.S. ((5-ethyl-1,3-dioxan-5-yl)meth acrylate, Ethyl phenyl(2,4,6-trimethylbenzoy phosphinate) ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, N.O.S. ((5-ethyl-1,3-dioxan-5-yl)meth acrylate, Ethyl phenyl(2,4,6-trimethylbenzoy phosphinate), MARINE POLLUTANT			
14.3 Transport hazard class(es)				
ADR/RID/ADN, IMDG, IATA				
Class	9 Miscellaneous dangerous substances and articles. 9			
14.4 Packing group ADR/RID/ADN, IMDG, IATA	III			
14.5 Environmental hazards:				
Marine pollutant:	Yes			
Consider antique (ADD/DID/ADA).	Symbol (fish and tree)			
Special marking (ADR/RID/ADN): Special marking (IATA):	Symbol (fish and tree) Symbol (fish and tree)			
<u> </u>	<u> </u>			
14.6 Special precautions for user:	Warning: Miscellaneous dangerous substances a articles.			
Hazard identification number (Kemler code):	90			
EMS Number:	F-A,S-F			
Stowage Category	A			
14.7 Maritime transport in bulk according to IM	70			
instruments	Not applicable			
14.8 Transport/Additional information:				
ADR/RID/ADN				
Limited quantities (LQ):	5L			
Excepted quantities (EQ)	Code: E1			
	Maximum net quantity per inner packaging: 30 ml			
	Maximum net quantity per outer packaging: 1000 ml			
Transport category:	3			
Tunnel restriction code:	(-)			
IMDG				
Limited quantities (LQ)	5L			
Excepted quantities (EQ)	Code: E1			
	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml			
IIN "Model Degulation".	UN 3082 ENVIRONMENTALLY HAZARDOU			
UN "Model Regulation":	SUBSTANCE, LIQUID, N.O.S. ((5-ETHYL-1, DIOXAN-5-YL)METHYL ACRYLATE, ETHY PHENYL(2,4,6-TRIMETHYLBENZOYL)			
	(Contd. on page			

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SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category E2 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)

None of the ingredients is listed.

· Regulation (EU) No 649/2012

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· REGULATION (EC) No 1005/2009 on substances that deplete the ozone layer – ANNEX I (Ozone-depleting potential)

None of the ingredients is listed.

- · Other regulations, limitations and prohibitive regulations
- · SVHC Candidate List of REACH Regulation Annex XIV Authorisation (14/6/2023)

None of the ingredients is listed

· REACH Regulation Annex XVII Restriction (25/9/2023)

See Section 16 for information about restriction of use.

None of the ingredients is listed

· REACH Regulation Annex XIV Authorisation List (8/4/2022)

None of the ingredients is listed

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

- · Recommended restriction of use Not applicable
- · Relevant hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

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H411 Toxic to aquatic life with long lasting effects.

· Classification according to Regulation (EC) No. 1272/2008

Skin corrosion/irritation

Serious eye damage/irritation

Skin sensitisation

Specific target organ toxicity (single exposure) Hazardous to the aquatic environment - long-term

(chronic) aquatic hazard

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No. 1272/2008.

The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, 1272/2008 and Regulation (EU) No 2020/878.

DISCLAIMER OF LIABILITY

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reason, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1B: Skin sensitisation – Category 1B

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

 $A quatic\ Chronic\ 2: Hazardous\ to\ the\ aquatic\ environment\ -\ long-term\ aquatic\ hazard\ -\ Category\ 2$

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