

SDS Service Summary No.: CANEC23002354205 Date: 27 Jun 2023 Page 1 of 1

### This SDS is to supersede SDS CANEC23002354201

SGS Job No. : SZP23-000265

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 : 28 Apr 2023

SDS Preparation Period : 28 Apr 2023-05 May 2023

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.

This report updates Physical and chemical properties & Stability and reactivity.

### 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.

Zm guan

**Project Engineer** 

Luguan

Printing date: 21.06.2023 Version number: 1 Revision date: 04.05.2023

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

- · 1.1 Product identifier
- · Trade name: ABS-Like Photopolymer Resin
- · UFI: X530-2076-600R-J4TN
- · 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: CANEC23002354205,SZP23-000265

## SECTION 2: Hazards identification

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



GHS09 environment

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



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye 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
- · Labelling according to Regulation (EC) No. 1272/2008

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

· Hazard pictograms





GHS07

GHS09

Printing date: 21.06.2023 Version number: 1 Revision date: 04.05.2023

Trade name: ABS-Like Photopolymer Resin

(Contd. from page 1)

#### · Signal word Warning

### · Hazard-determining components of labelling:

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

 $Poly[oxy(methyl-1,2-ethanediyl)], \ \alpha,\alpha'-(2,2-dimethyl-1,3-propanediyl)bis[\omega-[(1-oxo-2-propen-1-yl)oxy]-Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate$ 

#### · Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P280 Wear protective gloves / eye protection / face protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

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.

CAS: 66492-51-1	(5-ethyl-1,3-dioxan-5-yl)methyl acrylate	45%
EINECS: 266-380-7	Aquatic Chronic 2, H411; 🕚 Skin Irrit. 2, H315; Skin Sens. 1B, H317	
CAS: 84170-74-1	$Poly[oxy(methyl-1,2-ethanediyl)], \alpha,\alpha'-(2,2-dimethyl-1,3-propanediyl)$ $bis[\omega-[(1-oxo-2-propen-1-yl)oxy]-$	28%
	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	
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	

Printing date: 21.06.2023 Version number: 1 Revision date: 04.05.2023

Trade name: ABS-Like Photopolymer Resin

		(Contd. from page	ge 2
CAS: 84434-11-7	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	59	%
EINECS: 282-810-6	Aquatic Chronic 2, H411; 🗘 Skin Sens. 1B, H317		
CAS: 13463-67-7	Titanium dioxide	1.5	5%
EINECS: 236-675-5	<b>&amp;</b> Carc. 2, H351		
Index number: 022-006-00-2			
	Substance with a Union workplace exposure limit		
CAS: 1333-86-4	Carbon black	0.5	5%
EINECS: 215-609-9	Substance with a Union workplace exposure limit		

## **SECTION 4: First aid measures**

- · 4.1 Description of first aid measures
- · General description: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · 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: Not required.
- · 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).

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.

(Contd. on page 4)

Printing date: 21.06.2023 Version number: 1 Revision date: 04.05.2023

Trade name: ABS-Like Photopolymer Resin

(Contd. from page 3)

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	Ingredients with limit values that require monitoring at the workplace:		
CAS: 13463-67-2	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	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
- · 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

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

See Section 7 for information about design of technical facilities.

(Contd. on page 5)

Printing date: 21.06.2023 Version number: 1 Revision date: 04.05.2023

Trade name: ABS-Like Photopolymer Resin

(Contd. from page 4)

- · Individual protection measures, such as personal protective equipment
- · Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· 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.

· 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:



Tightly sealed goggles

- · **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: Liquid

· Colour: Grey

· Odour: It is considered mildly irritating.

• Odour threshold: Slight odor • 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
Flash point: >250 °C
Auto-ignition temperature: >450 °C
Decomposition temperature: >250 °C
pH; 6.8-7.2

· Viscosity

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

(Contd. on page 6)

Printing date: 21.06.2023 Version number: 1 Revision date: 04.05.2023

Trade name: ABS-Like Photopolymer Resin

(Contd. from page 5)

· Solubility

· Water: Microsoluble in water

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

· Density and/or relative density

Density at 25 °C:
Relative density:
Relative vapour density:
Particle characteristics:
1.05 g/cm³
Not available
Not available
Not available

· 9.2 Other information

· Appearance

· Form: Liquid

· Information with regard to physical hazard classes

· Explosives: Not applicable · Flammable gases: Not applicable · Aerosols: Not applicable · Oxidising gases: Not applicable Not applicable · Gases under pressure: Not applicable · Flammable liquids: Not applicable · Flammable solids: Not applicable · Self-reactive substances and mixtures: Not applicable · Pyrophoric liquids: Not applicable · Pyrophoric solids: 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:
Desensitised 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: Strong oxide, acid and alkali, Strong reducing agent
- · 10.4 Conditions to avoid: Humidity, sunlight, high temperature
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products:

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

## SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity
- · LD/LC50 values relevant for classification:

CAS: 13463-67-7 Titanium dioxide

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

(Contd. on page 7)

Printing date: 21.06.2023 Version number: 1 Revision date: 04.05.2023

Trade name: ABS-Like Photopolymer Resin

(Contd. from page 6)

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 irritation.
- · 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.

SECTION 14:	Transport in	formation

· 14.1 UN number or ID number · ADR/RID/ADN, IMDG, IATA	UN3082
· 14.2 UN proper shipping name · ADR/RID/ADN, IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5-ethyl-1,3-dioxan-5-yl)methyl acrylate, Ethyl phenyl(2,4,6-trimethylbenzoyl) phosphinate)
· IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5-ethyl-1,3-dioxan-5-yl)methyl

(Contd. on page 8)

Printing date: 21.06.2023 Version number: 1 Revision date: 04.05.2023

Trade name: ABS-Like Photopolymer Resin

	(Contd. from page 7
•	acrylate, Ethyl phenyl(2,4,6-trimethylbenzoyl) phosphinate), MARINE POLLUTANT
· 14.3 Transport hazard class(es)	
· ADR/RID/ADN, IMDG, IATA	
· Class	9 Miscellaneous dangerous substances and articles.
· Label	9
· 14.4 Packing group · ADR/RID/ADN, IMDG, IATA	III
· 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR/RID/ADN):	Yes Symbol (fish and tree) Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· 14.6 Special precautions for user:	Warning: Miscellaneous dangerous substances and articles.
· Hazard identification number (Kemler code):	90
· EMS Number: · Stowage Category	F-A,S-F A
· 14.7 Maritime transport in bulk according to IM instruments	10 Not applicable
· 14.8 Transport/Additional information:	
· ADR/RID/ADN · Limited quantities (LQ): · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category: · Tunnel restriction code:	3 (-)
· IMDG	51
· Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5-ETHYL-1,3- DIOXAN-5-YL)METHYL ACRYLATE, ETHYL PHENYL(2,4,6-TRIMETHYLBENZOYL) PHOSPHINATE), 9, III

## **SECTION 15: Regulatory information**

- $\cdot$  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

(Contd. on page 9)

Printing date: 21.06.2023 Version number: 1 Revision date: 04.05.2023

Trade name: ABS-Like Photopolymer Resin

(Contd. from page 8)

• 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 (17/1/2023)

None of the ingredients is listed

• REACH Regulation Annex XVII Restriction (13/12/2021)

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.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H411 Toxic to aquatic life with long lasting effects.

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

Skin corrosion/irritation

Serious eye damage/eye 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.

Printing date: 21.06.2023 Version number: 1 Revision date: 04.05.2023

Trade name: ABS-Like Photopolymer Resin

(Contd. from page 9)

#### 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 Irrit. 2: Serious eye damage/eye irritation – Category 2

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

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

#### \* Data compared to the previous version altered.

End of document

– EI