

#### **SDS Service Summary** No.: CANEC2205521501 Date: 13 Apr 2022 Page 1 of 1

SGS Job No. : CP22-015650 SZ

**Product Name** Standard Photopolymer Resin

Manufacturer / Supplier SHENZHEN ELEGOO TECHNOLOGY LIMITED.

Composition/Ingredient of product

(as per applicant submission)

See section 3 Composition/information on ingredients on the SDS

Job Receiving Date : 01 Apr 2022

**SDS** Preparation Period 01 Apr 2022-06 Apr 2022

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 2015/830, 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.

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**Project Engineer** 

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Printing date 13.04.2022 Version number 1 Revision: 06.04.2022

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

- · 1.1 Product identifier
- · Trade name: Standard Photopolymer Resin
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the mixture: 3D Printing material
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer / Supplier: SHENZHEN ELEGOO TECHNOLOGY LIMITED.
- · Full address:

FLAT/RM 1502 EASEY COMMERCIAL BUILDING 253-261 HENNESSY ROAD WANCHAI HK

- · Phone number: 18927469351
- · Email: kevin@elegoo.com
- · Only Representative / other EU contact point: Not available
- · Further information obtainable from: SHENZHEN ELEGOO TECHNOLOGY LIMITED.
- · 1.4 Emergency telephone number:

**GERMANY** 

Poison Center Berlin - Institute of Toxicology

Tel: +49 030 192 40

· 1.5 Reference Number: CANEC2205521501, CP22-015650 SZ

## 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

· Signal word Warning

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#### · Hazard-determining components of labelling:

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid

3,3,5-trimethylcyclohexyl acrylate

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

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 label before use.

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:

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

### 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: 86178-38-3	3,3,5-trimethylcyclohexyl acrylate	53%
EINECS: 289-200-9	Aquatic Chronic 2, H411; 🗘 Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
CAS: 55818-57-0 NLP: 500-130-2	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid	26%
	💠 Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 66492-51-1	(5-ethyl-1,3-dioxan-5-yl)methyl acrylate	14%
EINECS: 266-380-7	🔖 Aquatic Chronic 2, H411; 🚺 Skin Irrit. 2, H315; Skin Sens. 1B, H317	
CAS: 84434-11-7	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	5%
EINECS: 282-810-6	🔖 Aquatic Chronic 2, H411; 🕠 Skin Sens. 1B, H317	
CAS: 13463-67-7	Titanium dioxide	1.5%
EINECS: 236-675-5 Index number: 022-006-00-2	Carc. 2, H351	

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 carbon black
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 0.5%
 0.5%

CAS: 1333-86-4 carbon black
EINECS: 215-609-9 substance with a Community 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.

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.

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- · 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: Not required.
- · 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:					
13463-67-7 Titaniun	13463-67-7 Titanium dioxide (1.5%)				
WEL (Great Britain)	Long-term value: 10* 4** mg/m³ *total inhalable **respirable				
AGW (Germany)	Long-term value: 1.25* 10** mg/m³ 2(II);*alveolengängig**einatembar; AGS, DFG				
VLEP (France)	Long-term value: 10 mg/m³				
1333-86-4 carbon black (0.5%)					
WEL (Great Britain)	Short-term value: 7 mg/m³ Long-term value: 3.5 mg/m³				
VLEP (France)	Long-term value: 3.5 mg/m <sup>3</sup>				

## · Regulatory information

WEL (Great Britain): EH40/2020 AGW (Germany): TRGS 900 VLEP (France): ED 1487 12.2019

- · **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

Avoid contact with the eyes and skin.

See Section 7 for information about design of technical facilities.

#### · 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.

#### · Protection of hands:



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.

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#### · 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 protection:



Tightly sealed goggles

· Environmental exposure controls:

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

9.1 Information on basic physical and	chemical properties	
Appearance	chemical properties	
Form:	Liquid	
Colour:	Grey	
Odour:	Slight smell	
Odour threshold:	Not available	
pH-value:	Not available	
Change in condition		
Melting point/Freezing point:	Not available	
Initial boiling point and boiling rang	ge: Not available	
Flash point:	Not available	
Flammability (solid, gas):	Not available	
Auto-ignition temperature:	Not available	
Decomposition temperature:	Not available	
Self-igniting:	Not available	
Explosive properties:	Not available	
Explosion limits		
Lower:	Not available	
Upper:	Not available	
Oxidising properties:	Not available	
Vapour pressure:	Not available	
Density:	Not available	
Relative density:	Not available	
Vapour density:	Not available	
Evaporation rate:	Not available	
Solubility in / Miscibility with		
water:	Not available	
Partition coefficient: n-octanol/water:	Not available	

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Kinematic: Not available (Contd. of page 5)

Kinematic:	Not available
· 9.2 Other information	No further relevant information available.

### SECTION 10: Stability and reactivity

- · 10.1 Reactivity: No further relevant information available.
- · 10.2 Chemical stability: No further relevant information available.
- · 10.3 Possibility of hazardous reactions: No dangerous reactions known.
- · 10.4 Conditions to avoid: No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

## SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

$\cdot LD/I$	C50 val	ues relev	ant for cl	assification:
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#### 13463-67-7 Titanium dioxide

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

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

#### 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.

### 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.

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- · 12.6 Other adverse effects No further relevant information available.
- · 12.7 Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

### 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.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information	
14.1 UN-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. (3,3,5-trimethylcyclohexyl acrylate, (ethyl-1,3-dioxan-5-yl)methyl acrylate) ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, N.O.S. (3,3,5-trimethylcyclohexyl acrylate, (ethyl-1,3-dioxan-5-yl)methyl acrylate), MARIN POLLUTANT
14.3 Transport hazard class(es)	
ADR/RID/ADN, IMDG, IATA	
¥2>	
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:	Symbol (fish and tree)
Special marking (ADR/RID/ADN):	Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)
14.6 Special precautions for user:	Warning: Miscellaneous dangerous substances ar articles.
Hazard identification number (Kemler code): EMS Number:	90
	F- $A$ , $S$ - $F$

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	(Contd. of page
· Stowage Category	A
· 14.7 Transport in bulk according to A	Annex II of
Marpol and the IBC Code	Not applicable
· 14.8 Transport/Additional informatio	on:
· 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
UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOU
-	SUBSTANCE, LIQUID, N.O.S. (3,3,
	TRIMETHYLCYCLOHEXYL ACRYLATE, (5-ETHYL-1,
	DIOXAN-5-YL)METHYL ACRYLATE), 9, III

### **SECTION 15: Regulatory information**

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· MAK(German Maximum Workplace Concentration)			
13463-67-7	Titanium dioxide	3A	
1333-86-4	carbon black	<i>3B</i>	

- · 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
- · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- · National regulations:
- · Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- · Other regulations, limitations and prohibitive regulations
- · SVHC Candidate List of REACH Regulation Annex XIV Authorisation (17/1/2022)

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 (23/11/2021)

None of the ingredients is listed

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

### **SECTION 16: Other information**

#### · 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. Route of exposure: Inhalation.

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 2015/830.

#### 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 européen sur le transport 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

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