



## SDS Service Summary

No.: CANEC2205522801

Date: 13 Apr 2022

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SGS Job No. : CP22-015650 SZ  
Product Name : Plant-Based 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.

Zm guan  
Project Engineer

**Safety data sheet**  
**Regulation (EC) No. 1907/2006 and 1272/2008**

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: Plant-Based 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: CANEC2205522801,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.

- **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
- **Hazard-determining components of labelling:**  
(5-ethyl-1,3-dioxan-5-yl)methyl acrylate

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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.  
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.  
P273 Avoid release to the environment.  
P280 Wear protective gloves / eye protection / face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
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: 71302-80-2	Fatty acids, soya, epoxidized, Bu esters	45%
CAS: 66492-51-1 EINECS: 266-380-7	(5-ethyl-1,3-dioxan-5-yl)methyl acrylate ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Skin Sens. 1B, H317	30%
CAS: 86178-38-3 EINECS: 289-200-9	3,3,5-trimethylcyclohexyl acrylate ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	18%
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 Community workplace exposure limit	0.5%

**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.

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- 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 source.*  
*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.*
- **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.*

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### SECTION 8: Exposure controls/personal protection

#### · 8.1 Control parameters

##### · **Ingredients with limit values that require monitoring at the workplace:**

###### **13463-67-7 Titanium dioxide (1.5%)**

WEL (Great Britain)	Long-term value: $10 \cdot 4^{**} \text{ mg/m}^3$ *total inhalable **respirable
AGW (Germany)	Long-term value: $1.25 \cdot 10^{**} \text{ mg/m}^3$ 2(II);*alveolengängig**eintembar; AGS, DFG
VLEP (France)	Long-term value: $10 \text{ mg/m}^3$

###### **1333-86-4 carbon black (0.5%)**

WEL (Great Britain)	Short-term value: $7 \text{ mg/m}^3$ Long-term value: $3.5 \text{ mg/m}^3$
VLEP (France)	Long-term value: $3.5 \text{ mg/m}^3$

#### · **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.

###### · **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.

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· **Eye protection:**



Tightly sealed goggles

· **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**

· **Appearance**

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 range: 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

· **Viscosity**

Dynamic: Not available

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.

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- **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.

- **LD/LC50 values relevant for classification:**

#### 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)
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- **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** Based on available data, the classification criteria are not met.
- **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.
- **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.

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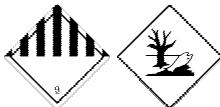
Toxic for aquatic organisms

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### 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

- |  |   |
|--|---|
| · <b>14.1 UN-Number</b><br>· <b>ADR/RID/ADN, IMDG, IATA</b>  | UN3082  |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR/RID/ADN, IATA</b><br><br>· <b>IMDG</b>   | ENVIRONMENTALLY HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. ((5-ethyl-1,3-dioxan-5-yl)methyl<br>acrylate, 3,3,5-trimethylcyclohexyl acrylate)<br><br>ENVIRONMENTALLY HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. ((5-ethyl-1,3-dioxan-5-yl)methyl<br>acrylate, 3,3,5-trimethylcyclohexyl acrylate), MARINE<br>POLLUTANT |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR/RID/ADN, IMDG, IATA</b>   |   |
|   |   |
| · <b>Class</b><br>· <b>Label</b>   | 9 Miscellaneous dangerous substances and articles.<br>9   |
| · <b>14.4 Packing group</b><br>· <b>ADR/RID/ADN, IMDG, IATA</b>  | III   |
| · <b>14.5 Environmental hazards</b><br>· <b>Marine pollutant:</b><br>· <b>Special marking (ADR/RID/ADN):</b><br>· <b>Special marking (IATA):</b>         | Symbol (fish and tree)<br>Symbol (fish and tree)<br>Symbol (fish and tree)  |
| · <b>14.6 Special precautions for user:</b><br>· <b>Hazard identification number (Kemler code):</b><br>· <b>EMS Number:</b><br>· <b>Stowage Category</b> | Warning: Miscellaneous dangerous substances and<br>articles.<br>90<br>F-A,S-F<br>A  |
| · <b>14.7 Transport in bulk according to Annex II of<br/>Marpol and the IBC Code</b>   | Not applicable  |
| · <b>14.8 Transport/Additional information:</b>  |   |
| · <b>ADR/RID/ADN</b><br>· <b>Limited quantities (LQ):</b>  | 5L  |

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· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>Transport category:</b>	3
· <b>Tunnel restriction code:</b>	-
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5-ETHYL-1,3-DIOXAN-5-YL) METHYL ACRYLATE, 3, 3, 5-TRIMETHYLCYCLOHEXYL 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	3B

· **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

· **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.

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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  
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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