



4SDS Service Summary

No.: CANEC23002367107

Date: 27 Jun 2023

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This SDS is to supersede SDS CANEC23002367103

SGS Job No. : SZP23-000265
Product Name : Standard 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 US Hazard Communication Standard 29 CFR 1910.1200.

Summary : As per request, the contents and formats of the SDS are prepared in accordance with US Hazard Communication Standard 29 CFR 1910.1200, 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 US Hazard Communication Standard 29 CFR 1910.1200 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

29 CFR 1910.1200

Printing date 06/21/2023


Version number 1

Reviewed on 05/04/2023

1 Identification

- **Product identifier**
- **Trade name:** *Standard Photopolymer Resin*
- **Recommended use of the chemical and restrictions on use:**
- **Application of the substance / the preparation:** 3D Printing
- **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
- **Other U.S. contact point:** Not available
- **Further information obtainable from:** SHENZHEN ELEGOO TECHNOLOGY CO., LTD.
- **Emergency telephone number:**
Poison Center
Tel: +1 800 222 1222
- **Reference Number:** CANEC23002367107,SZP23-000265

2 Hazard(s) identification

- **Classification of the substance or mixture**
Classification according to OSHA Hazard Communication Standard (29 CFR 1910.1200).
- 
 GHS07

Skin Irritation 2	H315 Causes skin irritation.
Eye Irritation 2A	H319 Causes serious eye irritation.
Sensitization - Skin 1	H317 May cause an allergic skin reaction.
Specific Target Organ Toxicity - Single Exposure 3	H335 May cause respiratory irritation.
- **Information concerning particular hazards for human and environment:**
The product has to be labeled due to the calculation procedure of OSHA Hazard Communication Standard (29 CFR 1910.1200).
- **Classification system:**
The classification is according to the latest edition of OSHA Hazard Communication Standard (29 CFR 1910.1200), and extended by company and literature data.
- **Label elements**
- **Labelling according to OSHA Hazard Communication Standard (29 CFR 1910.1200)**
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**
Poly[oxy(methyl-1,2-ethanediyl)], α,α' -(2,2-dimethyl-1,3-propanediyl)bis[ω -[(1-oxo-2-propen-1-yl)oxy]-4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid
(5-ethyl-1,3-dioxan-5-yl)methyl acrylate
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate

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· Hazard statements

- H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.

· Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
 P264 Wash thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing must not be allowed out of the workplace.
 P280 Wear protective gloves / eye protection / face protection.
 P302+P352 If on skin: Wash with plenty of water.
 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.
 P312 Call a poison center/doctor if you feel unwell.
 P321 Specific treatment (see on this label).
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P363 Wash contaminated clothing before reuse.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Hazards not otherwise classified (HNOC) No further relevant information available.

3 Composition/information on ingredients

· Chemical characterization: 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: 84170-74-1	Poly[oxy(methyl-1,2-ethanediyl)], α, α' -(2,2-dimethyl-1,3-propanediyl)bis[ω -[(1-oxo-2-propen-1-yl)oxy]-	41%
	⚠ Skin Irritation 2, H315; Eye Irritation 2A, H319; Sensitization - Skin 1, H317; Specific Target Organ Toxicity - Single Exposure 3, H335	
CAS: 55818-57-0	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid	38%
	⚠ Sensitization - Skin 1, H317	
CAS: 66492-51-1	(5-ethyl-1,3-dioxan-5-yl)methyl acrylate	14%
	⚠ Skin Irritation 2, H315; Sensitization - Skin 1B, H317	
CAS: 84434-11-7	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	5%
	⚠ Sensitization - Skin 1B, H317	
CAS: 13463-67-7	Titanium dioxide	1.5%
CAS: 1333-86-4	Carbon black	0.5%

4 First-aid measures

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

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- **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.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Special protective equipment and precautions for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:** Not required.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
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.
- **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.

7 Handling and storage

- **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 protection against explosions and fires:** No special measures required.
- **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 receptacle tightly sealed.

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8 Exposure controls/personal protection

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

CAS: 13463-67-7 Titanium dioxide (1.5%)

PEL (USA)	Long-term value: 15* mg/m ³ *total dust
REL (USA)	See Pocket Guide App. A
TLV (USA)	Long-term value: 0.2* 2.5** mg/m ³ resp. fraction, *nanoscale, **finescale, A3

CAS: 1333-86-4 Carbon black (0.5%)

PEL (USA)	Long-term value: 3.5 mg/m ³
REL (USA)	Long-term value: 3.5* mg/m ³ *0.1 in presence of PAHs; See Pocket Guide Apps.A+C
TLV (USA)	Long-term value: 3* mg/m ³ *inhalable fraction, A3

· **Regulatory information**

PEL (USA): Guide to Occupational Exposure Values (OSHA PELs)

REL (USA): Guide to Occupational Exposure Values (NIOSH RELs)

TLV (USA): Guide to Occupational Exposure Values (TLV)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **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.

· **Individual protection measures, such as personal protective equipment**

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **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.

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· **Eyeface protection:**

Tightly sealed goggles

9 Physical and chemical properties

· **General Information**· **Appearance:**

· Form:	Liquid
· Color:	Grey
· Odor:	It is considered mildly irritating.
· Odor threshold:	Slight odor

· **pH-value:** 6.8-7.2· **Change in condition**

· Melting point/Freezing point:	-60 °C (-76 °F)
· Initial boiling point and boiling range:	140 °C (284 °F)

· **Flash point:** >250 °C (>482 °F)· **Flammability:** Not available· **Auto-Ignition temperature:** >450 °C (>842 °F)· **Decomposition temperature:** >250 °C (>482 °F)· **Lower and upper explosion limit**

· Lower:	Not available
· Upper:	Not available

· **Vapor pressure:** <0.01 mmHg· **Density at 25 °C (77 °F):** 1.05 g/cm³ (8.76225 lbs/gal)· **Relative density:** Not available· **Vapor density:** Not available· **Evaporation rate:** Not available· **Solubility in / Miscibility with**· **Water:** Microsoluble in water· **Partition coefficient (n-octanol/water):** Not available· **Viscosity:**

· Dynamic:	200-400 mPas
· Kinematic:	Not available

· **Other information:** No further relevant information available.

10 Stability and reactivity

· **Reactivity:** No further relevant information available.· **Chemical stability:** Stable under recommended storage and handling conditions· **Possibility of hazardous reactions:** Strong oxide, acid and alkali, Strong reducing agent· **Conditions to avoid:** Humidity, sunlight, high temperature· **Incompatible materials:** No further relevant information available.

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

11 Toxicological information

- **Acute toxicity:**

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

CAS: 13463-67-7 Titanium dioxide

Oral	LD50	>20,000 mg/kg (rat)
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Dermal	LD50	>10,000 mg/kg (rabbit)
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CAS: 1333-86-4 Carbon black

Oral	LD50	10,000 mg/kg (rat)
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- **Skin corrosion/irritation:** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation:** Irritating effect.
- **Respiratory or skin sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

13463-67-7	Titanium dioxide	2B
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1333-86-4	Carbon black	2B
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- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

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· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**
· **DOT, IMDG, IATA** Not applicable

· **UN proper shipping name**
· **DOT, IMDG, IATA** Not applicable

· **Transport hazard class(es)**
· **DOT, IMDG, IATA**
· **Class** Not applicable
· **Label** -

· **Packing group**
· **DOT, IMDG, IATA** Not applicable

· **Environmental hazards:**
· **Marine pollutant:** No

· **Special precautions for user** Not applicable

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable

· **Transport/Additional information:** Not applicable

· **UN "Model Regulation":** Not applicable

15 Regulatory information

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

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

84170-74-1	Poly[oxy(methyl-1,2-ethanediyl)], α,α' -(2,2-dimethyl-1,3-propanediyl)bis[ω -[(1-oxo-2-propen-1-yl)oxy]-	ACTIVE
55818-57-0	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid	ACTIVE
66492-51-1	(5-ethyl-1,3-dioxan-5-yl)methyl acrylate	ACTIVE
13463-67-7	Titanium dioxide	ACTIVE
1333-86-4	Carbon black	ACTIVE

· **Proposition 65**

· **Chemicals known to cause cancer:**

13463-67-7 Titanium dioxide

1333-86-4 Carbon black

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

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· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· New Jersey Right-to-Know List:

13463-67-7 Titanium dioxide

1333-86-4 Carbon black

· New Jersey Special Hazardous Substance List:

1333-86-4 Carbon black

CA

· Pennsylvania Right-to-Know List:

13463-67-7 Titanium dioxide

· Pennsylvania Special Hazardous Substance List:

None of the ingredients is listed.

· Cancerogenity categories
· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

13463-67-7 Titanium dioxide

A4

1333-86-4 Carbon black

A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

13463-67-7 Titanium dioxide

1333-86-4 Carbon black

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.

The contents and format of this SDS are in accordance with 29 CFR 1910.1200.

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 reasons, 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.

· Date of preparation / last revision 06/21/2023
· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - Skin 1: Skin sensitisation – Category 1

Sensitization - Skin 1B: Skin sensitisation – Category 1B

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

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

End of document