

Safety Data Sheet for Chemical Products

SECTION 1. Identification of the substance/preparation and company

1.1 Product Name: DLP/SLA/LCD 3D Printer Photopolymer Resin

1.2 Product Model: Printer Resin

1.3 Main Application: 3D printing material

1.4 Applicant Name: SHENZHEN YONGCHANGHE TECHNOLOGY CO., LTD.

1.5 Applicant Address: 1001, Huaide international building, No. 73, Fuyong

section, Guangshen Road, Fuyong community, Fuyong

street,

1.6 Manufacturer Tel: 0755-27889946

1.7 Manufacturer Email: INFO@JAMGHE.COM

1.8 Emergency Phone: 18566622993

SECTION 2. Hazards identifications

2.1 Hazard Class (GHS):

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (part 2~4), classification of risk categories.

Skin corrosion/irritation, categories 2

Sensitisation, skin, categories 1

Serious eye damage/eye irritation, categories 2A

Aquatic Chronic 2

2.2 Pictograms:



2.3 Signal word:

Warning

2.4 Hazard description:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

2.5 Precautionary description:

- P261 Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 Wash hand and face thoroughly after handling
- P272 Contaminated work clothes are not allowed to be taken out of the workplace
- P273 Avoid releasing into the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

2.6 Other hazard

PBT and vPVB: None

SECTION 3. Composition / information on ingredients

Ingredient(s) of the product: Mixture

Substance name	CAS NO.	Purity	Mixture	Concent ration	Component proportion
Aliphatic polyurethane acrylic resin	68987-79-1	√	/	100%	45%
PO2-NPGDA Neopentyl glycol propoxylate diacrylate	84170-74-1	√	/	100%	28%
2-propionic acid -(5-ethyl-1, 3-dioxacyclohexane-5-yl) methyl ester	66492-51-1	√	/	100%	20%
Ethyl (2,4,6-trimethylbenzoyl) phenylphosphinate	84434-11-7	√	/	100%	5%
Titanium dioxide	13463-67-7	√	/	100%	1.5%
Black pigment	1333-86-4	√	/	100%	0.5%

SECTION 4. First aid measures

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

4.1 Following inhalation:

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

4.2 Following skin contact:

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

4.3 Following 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.

4.4 Following ingestion:

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

SECTION 5. Firefighting measures

5.1 Hazardous Characteristics:

No fire hazard.

5.2 Extinguishing Media:

Dry powder, chemical foam, carbon dioxide, water mist

5.3 Firefighting procedures:

As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.

Fight fires at a safe distance and with adequate protection.

Take all precautions to avoid mixing with combustibles.

5.4 Hazardous combustion products:

Carbon monoxide, organic volatiles

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear appropriate protective measures (SEE SECTION 8).

6.2 Environmental precautions:

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

6.3 Cleaning method:

Remove by liquid absorbing material (e.g. kieselguhr).

Adhered or collected material should be promptly disposed of. Disposal of discarded waste/pollutants refers to SECTION 13,clean up with detergent and avoid solvents.

SECTION 7. Safe handling and storage

7.1 Handling Notes:

Keep indoor ventilation or local exhaust device.

Keep away from heat sources/sparks/open flames/hot surfaces. Smoking is prohibited.

Use only outdoors or in a well-ventilated area.

7.2 Storage Notes:

Stored in cool and dry condition.

Do not store with food container and incompatible material (see section 10.2)

SECTION 8. Exposure controls / personal protection

8.1 Occupational Exposure Limit:

No relevant data

8.2 Engineering Control:

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Ensure that eyewash stations and safety showers are proximal to the work-station location.

8.3 Personal Protection:

General requirement		
Respiratory:	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.	
Eyes:	Wear protective goggle (Conform to EC EN 166 or US-NIOSH).	
Hands:	Wear protective gloves (such as butyl rubber), passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard.	

8.4 Sanitary Measure:

Forbid smoking, eating and drinking in working places. Washing hands after handling products.

SECTION 9. Physical and chemical properties

Appearance and Color	flowing liquid
Odour	Slight odor
PH value	6.8-7.2
Flammability	Noncombustible
Relative density (g/cm3)	1.05g/cm³ (25°ℂ)

Relative vapor density (g/L) (air = 1)	>1
Vapor pressure(MPa)	<0.01mmHg
Octanol/water partition coefficient	No Data
Viscosity (mPa·s)	350-650 (mPa·s) (25℃)
Flash point(℃,Closed cup)	>250
Boiling point(℃)	140
Melting/freezing point (°C)	-60
Evaporation rate (kg/s)	No Data
UEL% (V/V)	Not Applicable
LEL% (V/V)	Not Applicable
Auto-ignition temperature(℃)	>450
Decomposition temperature(℃)	>250
Solubility	Slightly soluble in water, soluble in
	organic solvents such as benzene,
	alcohol, ether

SECTION 10. Stability and reactivity

10.1 Stability:

Stable under recommended storage and handling conditions (See section 7).

10.2 Material for avoiding:

Strong oxide, acid and alkali, Strong reducing agent.

10.3 Contact conditions for avoiding:

Humidity, sunlight, high temperature.

10.4 Hazardous decomposition products:

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

SECTION 11. Toxicological information

11.1 Acute toxicity:

Although no data of known appropriate health effects on humans or animals exist, this substance is expected to be mildly injurious in ingestion.

11.2 Skin corrosion/irritation:

Causes skin irritation.

11.3 Serious eye damage/irritation:

Exposure to products can cause severe eye irritation, with symptoms including severe pain, burning, tearing or swelling.

11.5 Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

11.6 Carcinogenicity:

Based on available data, the classification criteria are not met.

11.7 Reproductive toxicity:

Based on available data, the classification criteria are not met.

11.8 STOT-single exposure:

Based on available data, the classification criteria are not met.

11.9 STOT-repeated exposure:

Based on available data, the classification criteria are not met.

11.10 Aspiration hazard.:

Low volatility of the product under normal conditions of use. There are no symptoms that are harmful to health. Gas or vapor may be produced when the temperature is raised during the process. Causes irritation to the respiratory tract. Symptoms of respiratory irritation may include coughing, mucus secretion, and shortness of breath.

SECTION 12. Ecological information

12.1 Toxicity:

Serious eye damage/eye irritation, categories 2A

12.2 Persistence and degradability:

No data available.

12.3 Bioaccumulative potential:

No data available.

12.4 Mobility in soil

No data available.

12.5 Other Dangers:

PBT and vPVB evaluation results: Not applicable

SECTIONN 13. Disposal considerations

13.1 Handling method for waste:

Handling waste according to the local regulations. Contact specific waste disposal company or companies recommended by local laws.

13.2 Handling method for uncleaned packaging

The packaging bottle must be emptied and then disposed of according to official regulations.

SECTION 14. Transport information

This is not classified as a hazardous/dangerous material under IATA, IDMG, DOT regulations.

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Packaging Label	None
UN NO	None
Technical name	None
Transport hazard class	None
Subsidiary hazard class	None
Packing group	None
Special Provisions	None

SECTION 15. Regulatory information

15.1 Safety, health and environmental regulations / laws for pure substances or mixtures Catalogue of hazardous chemicals (2015 Edition)

Not included in the list

MAK (German Maximum Workplace Concentration)

Not included in the list.

EU law 2012/18/EU

Hazardous substances Appendix I: Not included in the list.

Seveso category: Not applicable

Qualifying quantity(tonnes) for the application of lower-tier requirements: Not applicable

Qualifying quantity(tonnes) for the application of upper-tier requirements:Not applicable

Other regulations:

Not included in the list.

EU regulations REACH annex XVII restricted substances (2062019)

Not included in the list.

Substances authorized in Annex IV of EU regulation REACH (13 / 6 / 2017)

Not included in the list.

15.2 Safety assessment of chemical substances

Not evaluated.

SECTION 16. Other information

The information in this MSDS is obtained from sources we believe to be reliable. However, we have no express or implied warranty on the data provided. The handling, storage, use or disposal of this product is beyond our control and may exceed our knowledge. Under no circumstances will we be liable for any loss, damage and related costs arising from improper handling, storage, use or disposal of this chemical. This MSDS is based on this product and can only be used for this product.

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