

SAFETY DATA SHEET

SECTION1 PRODUCT AND COMPANY IDENTIFICATION

Product name: Surgical Guide Resin
Company: Shenzhen PioCreat 3D Technology Co., Ltd
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SECTION2 HAZARDS IDENTIFICATION

GHS Classification:

Physical Hazards:

Not Classified

Health Hazards:

Acute toxicity-Oral Category 4

Serious eye damage/eye irritation Category 1

Skin sensitization Category I

Specific target organ toxicity-Single exposure Category 3 (Respiratory tract irritation)

Environmental Hazards:

Hazardous to the aquatic environment-Acute hazard Category 1

Hazardous to the aquatic environment-Chronic hazard Category 2

The hazards not mentioned are not applicable or no data available.

Label Elements:

Pictogram:



Signal Word:

Danger

Hazard Statements:

H302 Harmful if swallowed.

- H318 Causes serious eye damage.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

Prevention Precautionary Statements:

- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear eye protection /face protection/protective gloves.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.

Response Precautionary Statements:

- P301+P317 IF SWALLOWED: Get medical help.
- P330 Rinse mouth.
- P305+P354+P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P317 Get medical help.
- P302+P352 IF ON SKIN: Wash with plenty of water
- P333+P317 If skin irritation or rash occurs: Get medical help.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P319 Get medical help if you feel unwell.
- P391 Collect spillage.

Storage Precautionary Statements:

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.

Disposal Precautionary Statements:

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

Other Hazards:

- No data available.

SECTION3 INFORMATION ON INGREDIENTS

Ingredient	Concentration	CAS No.	EC No.
Oligomer	30-55%	/	/
Monomer 1	15-30%	33791-58-1	251-678-1
Monomer 2	15-30%	42594-17-2	255-901-3
Monomer 3	15-30%	53879-54-2	500-123-4
Photoinitiator	1-5%	75980-60-8	278-355-8
Additive	<5%	/	/

SECTION4 FIRST-AID MEASURES

Skin Exposure:

In case of skin contact, flush with copious amounts of water. If skin irritation or rash occurs, Call a physician.

Eye Exposure:

In case of contact with eyes, flush immediately with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician immediately.

Inhalation Exposure:

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician.

Oral Exposure:

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Most Important Symptoms/Effects, Acute and Delayed:

No data available.

Indication of Immediate Medical Attention and Special Treatment Needed, if Necessary:

No data available.

SECTION5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Suitable: Dry chemical, Water spray, Carbon dioxide or appropriate foam.

Specific Hazards Arising from the Chemical:

Environmentally hazardous substances. Take care as it may decompose upon combustion or in high temperatures to generate Carbon oxides, nitrogen oxides, copper oxides, phosphorus oxides, etc.

Special Protective Action for Fire-fighters:

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Fire-extinguishing work is done from the windward. Uninvolved persons should evacuate to a safe place.

SECTION6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protective equipment. Remove all sources of ignition. Avoid breathing vapour or mist. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to noninvolved personnel should be controlled around the leakage area by roping off.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Avoid entering drains. Avoid release to the environment. Collect spillage.

Methods and Materials for Containment and Cleaning up:

Mix with inert material (e. g. dry sand, vermiculite) and transfer to a dry, clean, lidded container for disposal. Avoid inhalation. Ventilate area and wash spill site after material pickup is complete.

SECTION7 HANDLING AND STORAGE

Precautions for Safe Handling:

Operators should be trained and strictly abide by operating procedures. Wear appropriate protective clothing and gloves. Avoid inhalation. Avoid contact with eyes, skin and clothing. Prevent generation of vapour or mist. Handling is performed in a well ventilated place. Keep away from ignition sources, heat and flame. Incompatibilities: Strong oxidizing agents, strong acids, strong bases. Wash hands and face thoroughly after operation. Handling and unloading should be light, to prevent packaging broken, damp and cause losses. Working place should be equipped with appropriate varieties and quantities of fire-fighting equipment and leakage emergency treatment equipment.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep away from ignition sources, heat and flame. Incompatibilities: Strong oxidizing agents. strong acids. Storage place should be equipped with appropriate varieties and quantities of fire-fighting equipment and leakage emergency treatment equipment.

SECTION8 EXPOSURE CONTROL/PPE

Control Parameters:

GBZ 2.1-2019 Occupational Exposure Limits for Hazardous Agents in the Workplace - Part 1: Chemical
Hazardous Agents: Not set up ACGIH: Not set up

Appropriate Engineering Controls:

Mechanical exhaust required. Safety shower and eye bath.

Individual Protection Measures:

Eye/Face Protection:

Wear chemical safety glasses.

Skin Protection:

Hand Protection: Wear compatible protective gloves.

Body Protection: Wear appropriate protective clothing.

Respiratory Protection:

Wear government approved respirator.

Thermal Hazards:

No data available.

Other Protect:

No smoking, drinking and eating at working site. Wash thoroughly after handling.

SECTION9 PHYSICAL/CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Transparent
Odor:	Weak odor
pH Value:	Not applicable
Solubility(ies):	Immiscible in water
Boiling Point, Initial Boiling Point and Boiling	>146°C
Melting Point/Freezing Point:	No data available
Plash Point(Closed Cup):	>96°C
Density/Relative Density:	1.15g/cm ³
Kinematic Viscosity:	No data available
Lower/Upper Explosion Limit/Flammability Limit:	No data available
Vapour Pressure:	No data available
Relative Vapor Density:	No data available
Partition Coefficient N-Octanol/Water(Log Value):	No data available
Autoingnition Temperature:	No data available
Decomposition Temperature:	No data available
Particle	No data available
Flammability (Solid, Gas) :	No data available

SECTION10 STABILITY AND REACTIVITY

Reactivity:

No data available.

Chemical Stability:

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions:

No data available.

Conditions to Avoid:

No data available.

Incompatible Materials:

Strong oxidizing agents, strong acids, strong bases.

Hazardous Decomposition Products:

Carbon oxides, nitrogen oxides, copper oxides, phosphorus oxides, etc.

SECTION11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

Propenoic acid polymer: Rat Oral LD₅₀: 1500 mg/kg; Rat Inhalation LC₅₀: > 5.1 mg/L -4h

Skin Corrosion/Irritation:

No data available.

Serious Eye Damage/Irritation:

Causes serious eye damage.

Respiratory Sensitization:

No data available.

Skin Sensitization:

May cause an allergic skin reaction.

Germ Cell Mutagenicity:

No data available.

Carcinogenicity:

No data available.

Reproductive Toxicity:

No data available.

Specific Target Organ Toxicity -Single Exposure:

May cause respiratory irritation.

Specific Target Organ Toxicity -Repeated Exposure:

No data available.

Aspiration Hazard:

No data available.

SECTION12 ECOLOGICAL INFORMATION

Toxicity:

Propenoic acid polymer:

Short-term toxicity to fish LC₅₀: 27 mg/L-96h;

Short-term toxicity to aquatic invertebrates LC50: 47 mg/L-96h;

EC50-freshwater algae-0.13 mg/L-72h;

EC₁₀, NOEC-freshwater algae 0.03 mg/L-72h

Persistence and Degradability:

No data available.

Bioaccumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

SECTION13 DISPOSAL CONSIDERATION

Disposal Methods:

Recycle as far as possible. If unable to recycle, it is recommended to use incineration method for disposal under supervision. This product should not be disposed of by discharge into sewers. Return empty containers to the manufacturer or dispose of them in accordance with national and local regulations. Follow the relevant provisions of national and local regulations before disposal. It is recommended to be disposed of by a qualified chemical waste treatment department.

SECTION14 TRANSPORT INFORMATION

RID/ADR (2023 Edition):	Proper Shipping Name: Environmentally hazardous substance, liquid, n. o. s (Propenoic acid polymer) UN Number: Not applicable Hazard Class: Not applicable Packing Group: Not applicable
IATA DGR (64nd Edition) :	Proper Shipping Name: Environmentally hazardous substance, liquid, n. o. s (Propenoic acid polymer) UN Number: Not applicable Hazard Class: Not applicable Packing Group: Not applicable

IMO IMDG Code(41-22 Edition): Proper Shipping Name: Environmentally hazardous substance, liquid, n. o. s (Propenoic acid polymer)
UN Number: Not applicable
Hazard Class: Not applicable
Packing Group: Not applicable
EmS No.: F-A, S-F
Marine Pollutants: No.
Environmental Hazards: No.
Special Precautions for User: No data available.
Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

SECTION15 REGULATORY INFORMATION

Montreal Protocol:

Not listed.

Stockholm Convention:

Not listed.

Rotterdam Convention:

Not listed.

EINECS/ELINCS:

All ingredients in the product are listed.

TSCA:

All ingredients in the product are listed.

IECSC:

All ingredients in the product are listed.

SECTION16 OTHER INFORMATION

Reference Standard:

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), 8th revised edition

Abbreviations and Acronyms:

CAS: Chemical Abstracts Service EC: European Commission ACGIH: American Conference of Governmental Industrial Hygienists LD₅₀: Lethal dose, 50% LC₅₀: Median lethal dose EC₅₀: Effective concentration of substance that causes 50% of the maximum response EC_x: Concentration associated with x% response NOEC: No observed effect concentration RID: Regulations concerning the International

Carriage of Dangerous Goods by Rail ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IATA DGR: International Air Transport Association Dangerous Goods Regulations IMO IMDG CODE: International Maritime Organization International Maritime Dangerous Goods Code EmS: Emergency schedule MARPOL: International Convention for the Prevention of Pollution from Ships IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances TSCA: Toxic Substances Control Act IECSC: Inventory of Existing Chemical Substances in China

Other Information:

This SDS is compiled based on the information such as ingredients provided by the applicant and our current knowledge. This SDS shall be used only as a guide. The users of this SDS must make independent judgments on the correctness and completeness and then decide its suitability according to the actual situation. The users should take the relevant legal responsibilities for the consequences of use.