

Bio(PLA)-Based Resin Technical Data Sheet

Version 1.0

1. Product introduction

Bio(PLA)-Based Resin is a high UV curable resin for 3D printing. It has the following characteristics:
Green bio(PLA) -based more environment friendly , high hardness and toughness, good precision and resolution, wide range of application in LCD 3D printer. Suitable for all kinds of hand-made,toys design ,dental mold and high resolution industrial model.

2. Physical Performance Parameters

Items	Testing Criteria	Parameters
Density	Hydrometer	1.05-1.11g/cm ³ (25℃)
Viscosity	Brookfield DV II	340MPa·s (25℃)

3. Mechanical Performance Parameters

Items	Testing Criteria	Parameters
Hardness Shore D	ASTM D 2240	82D
Tensile strength	ASTM D 638	58MPa
Tensile modulus	ASTM D 638	875Mpa
Elongation at break	ASTM D 638	10%
Flexural strength	ASTM D 790	97MPa
Flexural modulus	ASTM D 790	1830Mpa
Impact strength,notched Izod	ASTM D 256	84.36kJ/m ²
Heat deflection temperature	ASTM D648	82℃

4. Parameter suggeston

Printer	Layer Height	Bottom Exposure Time	Exposure Time	Motor Speed
HALOT Sky	0.025-0.1mm	35~50s	3.0s	1-3mm/s
HALOT One	0.025-0.1mm	40-50s	3.5-4s	1-3mm/s
DJ89	0.05~0.1mm	35~50s	2.5-3	1-3mm/s

5. Post-Processing Procedure and Note

- ❖ The print model should be cleaned with absolute ethanol/isoprpanol and can be cleaned with a low-frequency ultrasonic cleaner. If high-frequency and high-power ultrasonic cleaning is used for the model, it may cause certain damage to the surface of the model.
- ❖ Thoroughly blow the model dry with a hair dryer or the like.

Bio(PLA)-Based Resin Technical Data Sheet

Version 1.0

- ❖ It is recommended to remove the support for model with supports first, and then post-cure treatment. If you remove the supports after it's been post-cured , it will easily cause damage to the contact surface of the support point.
- ❖ For some occasions where certain toughness is required, you can choose to cure with UV lamp for 5 minutes. The printed parts should be kept in a cool dry place.

6. Safety Precautions

- ❖ Do not contact or eat the product. If you have any allergic reaction, please go to the hospital immediately.
- ❖ Please wear a respirator while using since the product is liquid with a slight odor.
- ❖ Please wear the protective gloves and respirators before using the printer.
- ❖ Please store the product in the sealed container after using. And do not expose it in sunlight.
- ❖ Please keep away from children and pregnant.

7. Storag

This product has warranty of 1 year, please keep the product in cool and dry place to avoid direct sunlight.

8. Disclaimer

The values given in this data sheet are for reference and comparison only. Actual values may vary with printing conditions, and the end-use performance of printed models depends on model design, environmental conditions, printing conditions, etc.