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GratKit

Technical Datasheet

GratKit Resin –High Strength Resin

Identification

Name	GratKit High Strength Resin
Usage	DLP/LCD 3D Printing, 405nm
Manufacturer	GratKit

Recommended print settings

Type Name	Monochrome Printer
UV length[nm]	385~410
Light Intensity[μw/cm²]	3500-4500
Post Cure Light Intensity[mw/cm²]	200
Layer Height[mm]	0.025 | 0.05
Bottom Layer Count	5-8
Bottom Layer Exposure Time[s]	25-35
Other Layer Exposure Time[s]	4-8
Rest Time After Retract[s]	5-7
Lifting Distance[mm]	8
Lifting Speed[mm/min]	80
Retract Speed[mm/min]	150
Environment Temperature[℃][1]	30 or higher

1. Environment temperatures too low may cause printing failed.
2. It is better and necessary to use a soft brush and IPA to clean the surface of the prints. Using an ultrasonic cleaner can clean some parts that are difficult to clean under normal conditions, and we also recommend it.

Specification

Physical Properties	Typical Value	Method
Density[g/cm³][1]	1.1-1.25	Liquid Density Meter
Viscosity[MP.s][1]	3000-5000	NDJ-8S Viscometer
Shore Hardness[D]	78-82	ISO 164
Tensile Strength[MPa][2]	41.89±1.8	ASTM D638
Tensile Modulus[GPa][2]	0.49±0.05	ASTM D638
Elongation[%][2]	21.2±0.3	ASTM D638
Flexural Modulus[GPa][2]	1.11±0.1	ASTM D790
Flexural Strength[MPa][2]	43.45±0.2	ASTM D790
Impact strength[J/M][2]	279.5±30	ASTM D256

(1) 30℃ ;
(2) Cured: 200mw/cm², in the water, 2min front+2 min back. Then put it into oven heat to 80℃ and time is 60min. Print environment is 30℃.

Tips

Due to the high viscosity of this resin, temperatures that are too low will cause printing to fail and it is recommended to maintain a good temperature level in your room. If your ambient temperature is low, you can place it in hot water to preheat before use, which will greatly improve the printing success rate.

Safety Information

This resin is not meant for contact with food, drinks, or medical use on or in a human body. Always read the material safety data sheet thoroughly.
Resins are classified as dangerous chemicals and it is necessary to dispose of them properly in designated containers. Resin bottles (empty or full) must never be disposed of or poured into the general waste.

Disclaimer: