SUNLU

Technical Data Sheet

SUNLU ABS-Like UV Resin

Product Introduction

Product Introduction	Excellent Result, Low odor, Low shrinkage. Good overall performance in tensile, bending, and toughness. Able to be drilled and tapped. Significantly better toughness performance than standard resins, exhibiting good toughness, and has certain impact resistance, making the model less likely to break when dropped. Good aging resistance. Similar molding performance to ABS Suitable for use in models and engineering samples that require certain toughness, with high cost-effectiveness.

Liquid Properties

Curing Wavelength	395-405nm
Liquid Density (FA1004J Density Scale)	1.04-1.14 g/cm3
Resin Viscosity(NDJ-8S Rotational Viscometer)	200-400 mPa.s,25℃
Storage Conditions	15-35℃(Sealed and light-shielded storage)
Shelf Life	24 Months
Cleaning Method	Use 95% or higher ethanol or isopropanol for cleaning, and it is more effective when combined with a brush or ultrasonic cleaning.
Post-Curing Method	After cleaning,post-curing process in a curing chamber for 3-5 minutes.
Curing Wavelength	395-405nm

Suggested Printing Parameters

Optimal Printing Environment Temperature	25-30℃
Recommended Layer Thickness	0.05mm（More detailed results applying 0.03mm）
Bottom Layers	3-5 Layers
Bottom Layer Exposure Time	Color screen printer:20-80 seconds Monochrome screen printer: 10-60 seconds
Layer Exposure Time	Color screen printer:4-15 seconds Monochrome screen printer:1.5-4 seconds
Lift Height	6-10 mm (For machines with a screen size of 7 inches or above, it is recommended to set the lift height more than 8 mm, and for machines with that of ten inches or above, it is recommended to set the lift height more than 10 mm).
Lift Speed	60-120 mm/min
Return/Descent Speed	120-180 mm/min
Lamp Off Delay (seconds)	0.5-1 s

Post-Printing Cured Performance

Item	Data
Solid Density (FA1004J Density Scale)	1.16-1.22 g/cm3
Volumetric Shrinkage	6-8 %
Shore Hardness	75-80 D
Coefficient of Thermal Expansion	95*E-6/K
Glass Transition Temperature(Tg)	44 ℃
Decomposition Temperature @5%TGA	338.33 ℃
Heat Deflection Temperature ISO75 @0.45MPa	50 ℃
Tensile Strength ISO527	34 MPa
Young's Modulus ISO527	1020 MPa
Elongation at Break ISO527	20%
Flexural Strength ISO 178	36 MPa
Flexural Modulus ISO 178	1070 MPa
Izod Impact Strength ISO 179	60 J/m

Notes

This resin is not meant for contact with food, drinks, or medical use on or in the human body.

Always read the material safety data sheet thoroughly. Resins are classified as dangerous chemicals and must be disposed of properly in designated containers. Resin bottles (empty or full) must never be disposed of or poured into the general waste.

Precautions

1. Environmental requirements: 20-30° Cambient temperature, do not print near windows or in other environments exposed to UV light, and try to keep away from children and pregnant woman.
2. Shake the resin well before use to prevent the components from solidification.
3. Wear nitrile gloves and a protective mask when using the resin and keep the room ventilated.
4. The residue on the surface of the 3d printed resin parts can be washed with alcohol at a concentration of 95% or more, and it is recommended that the cleaning process should not take more than 1 minute.
5. pores and other details of the alcohol is not easy to clean to the place can be used ultrasonic or filled with alcohol syringes and other auxiliary tools to clean, and alcohol should not be cleaned too many times to ensure the purity of alcohol, the concentration of impure alcohol cleaning model will lead to whitening and wash the phenomenon of unclean. Specific cleaning time, until the surface of the resin parts no sticky feeling, no residual resin in the pores of the effect shall prevail.
6. Drain or blow dry the residual alcohol after cleaning and place under UV light or sunlight, and irradiate all parts of the model evenly until the surface of the resin parts feels dry and hard enough.
7. Use hand sanitizer or dishwashing liquid to wash away any resin residue on the skin, but try not to touch the alcohol-washed resin residue with your hands.
8. If the resin accidentally gets into your eyes or mouth, wash it off immediately with plenty of water and consult a doctor if you feel unwell.

Safe Package:

Thickened aluminum bottle completely protected from light. Leak-proof bottle fully wrapped with a plastic bubble bag to ensure the resin stays in right place.