

Tough Resin White Datasheet



Overview

Tough Resin White stands out as a top choice among SLA 3D printing materials. In addition to the precision and quality SLA printing is known for, this resin offers excellent durability and strength—perfect for designs that demand reliable mechanical performance.

As-printed Part's Tolerance: $\pm 200\mu\text{m}$ or 0.2%

Maximum Printing Size: 1700*800*600mm

Properties

Thermal Properties	Metric	Method
Heat Deformation (0.46 MPa)	76°C	ASTM D648M
Mechanical Properties	Metric	Method
Tensile Strength	27.5MPa	ASTM D638M
Tensile Modulus	2260MPa	ASTM D638M
Elongation at Break	16%	ASTM D638M
Flexural Properties	Metric	Method
Flexural Strength	67.5MPa	ASTM D790
Flexural Modulus	2700MPa	ASTM D790M
Impact Properties	Metric	Method
Notched Impact Strength	64 J/m	ASTM D256A
Other Properties	Metric	Method
Glass-transition Temperature	79.5°C	DMA, E'' peak
Density	1.13g /cm ³	25°C
Hardness	80.5 Shore D	ASTM D2240

Pros

Known for its impressive strength and rigidity, Tough Resin White offers both durability and versatility. Its surface is easy to paint or dye, making it ideal for a wide range of applications—from visual and functional prototypes to proof-of-concept models.

Cons

Layer lines can be more visible with this resin compared to other materials. If the object is solid or thick, a subtle yellow tint may also appear. As with most resin-based materials, prolonged exposure to direct sunlight can cause the printed item to turn yellow and become brittle over time.

Applications

Concept Prototypes

Consumer Electronics

Home Supplies

Industrial Display Panels

Jewelries

Experimental Instruments

Interior Decorations

Sculptures and Props

Mobile Power Banks