Standard Resin Black Datasheet

Overview

Quality Resin Black is a UV-sensitive material specifically developed for SLA 3D printing. It produces parts with a sleek, smooth finish and reliable toughness. What sets this resin apart is its distinctive deep black color, making it ideal for applications that demand both strength and a bold, polished appearance.

As-printed Part's Tolerance: ±200μm or 0.2%

Maximum Printing Size: 800*800*550mm

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Properties

Thermal Properties	Metric	Method
Heat Deformation	55℃	ASTM D648M
Mechanical Properties	**Metric**	**Method**
Tensile Strength	57.5MPa	ASTM D638M
Tensile Modulus	1300MPa	ASTM D638M
Elongation at Break	7.8%	ASTM D638M
Flexural Properties	**Metric**	**Method**
Flexural Strength	62.5MPa	ASTM D790
Flexural Modulus	1600MPa	ASTM D790M
Impact Properties	**Metric**	**Method**
Notched Impact Strength	49.5 J/m	ASTM D256A
Other Properties	**Metric**	**Method**
Glass-transition Temperature	65℃	DMA, E" peak
Density	1.187 g/cm³	25℃
Hardness	81.5 Shore D	ASTM D2240

Pros

Featuring a rich, solid black hue, it delivers outstanding value and a naturally smooth finish that's ready to accept paint. Its low water uptake ensures reliable performance in waterproof applications, while its sleek surface makes it perfect for visual prototypes, proof-of-concept models, artistic creations, and figurines.

Cons

In some prints, layer lines may be more visible depending on the design. When the walls are thin, the material can appear semi-translucent, allowing light to pass through. Like most resin-based materials, extended exposure to direct sunlight can cause printed parts to turn yellow and become brittle over time.

Applications

Sculptures and Props Consumer Electronics Home Supplies

Industrial Display Panels Jewelries Experimental Instruments

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Interior Decorations Figurines Game Consoles

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