

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: $\pm 200\mu\text{m}$ or 0.2%

Maximum Printing Size: 800*800*550mm

Properties

Thermal Properties	Metric	Method
Heat Deformation	55°C	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°C	DMA, E'' peak
Density	1.187 g/cm ³	25°C
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

Interior Decorations

Figurines

Game Consoles