

Material Information



Quality Resin Black

Introduction

Quality Resin Black, also known as Somos ® Imagine Black, is a photosensitive resin material. It is designed for SLA 3D Printing technology. Products printed with Quality Resin Black have smooth surface finishing and good toughness. This material has a unique black in color.

Advantages

Solid black color. Has high cost-effectiveness. Gives smooth surface and can be easily colored or painted. Has low water absorption rate makes it suitable for waterproof designs.

Disadvantages

Layer lines maybe relatively noticeable. Can be semi-translucent if the wall of design is thin.

Tolerance

±200µm or 0.2%

Recommendation

Quality Resin White is ideal for regular applications such as looks-like prototypes, proof-of-concept models, art designs and figurines. It gives out a beautiful and smooth surface finishing that is ideal for almost all kinds of 3D Plus services.

Material Specifications		
Heat deformation	ASTM D648M	55 °C
Hardness	ASTM D2240	81.5, Shore D
Tensile strength	ASTM D638M	57.5 MPa
Tensile modulus	ASTM D638M	1300 MPa
Elongation at Break	ASTM D638M	7.8%
Flexural modulus	ASTM D790M	1600 MPa
Notched impact strength	ASTM D256A	49.5J/m
Flexural strength, Mpa	ASTM D 790	62.5MPa
Glass-transition Temperature	DMA, E"peak	65°C
Density	25°C	1.187g/cm ³

Attention

Products printed with resin material will gradually turn yellow and brittle after long-term exposure to direct sunlight because of the nature of this material. If you want to prevent this, you may need to keep it away from direct sunlight or add 3D Plus services such as painting to block sunlight.

Applications

3DSPRO find people using Quality Resin Black to make functional parts and prototypes in the following industries & applications.

Artwork and toys:

Sculptures, props, jewelries, lighting, miniatures, figurines, interior decorations, toys, dolls, etc.

Consumer electronics appliances:

Laptops, tablets, mobile phones, digital cameras, game consoles, MP3, mobile power bank.

Electromechanical equipment:

Industrial display panels, switches, sockets, power tools, electrical instruments, experimental instruments, measuring tools, etc.

Home supplies:

Air conditioner, air purifier, vacuum cleaner, electric fan, ironing machine, water dispenser, juicer, hair dryer, etc.