

Material Information

Premium Clear Resin



Introduction

Premium Clear Resin, also known as Somos® WaterShed XC11122, is a photosensitive resin material. It is designed for SLA 3D Printing technology. Products printed with premium clear resin will be transparent or translucent, with a smooth surface finish. This material is the clear choice for applications that require transparent features.

Advantages

Clear, transparent material that builds parts with outstanding clarity. Water resistance with improved strength and dimension retention in humid conditions. Tough and durable. The translucent option is also available.

Disadvantages

Air bubbles may occasionally show up inside of the print when printing a solid and thick product.

Tolerance

±200µm or 0.2%

Recommendation

Premium clear resin is ideal for regular applications such as looks-like prototypes, proof-of-concept models, art designs and figurines. It allows you to see through a design and gives out a smooth surface finish.

Material Specifications		
Heat Deformation (0.46 MPa)	ASTM D648M	50°C
Heat Deformation (1.82 MPa)	ASTM D648M	49°C
Tensile Strength	ASTM D638M	50.4MPa
Tensile Modulus	ASTM D638M	2770MPa
Elongation at Break	ASTM D638M	15.5%
Flexural Strength	ASTM D790M	68.7MPa
Flexural Modulus	ASTM D2240	2205MPa
Notched Impact Strength	ASTM D256A	45 J/m
Water Absorption	ASTM D570-98	0.26%

Attention

Due to the characteristics of resin materials, products printed with resin materials will gradually turn yellow and become brittle after long-term exposure to direct sunlight. If you want to avoid this from happening, you may need to move it out of direct sunlight or add 3D Plus™ services (such as spray painting) to block out the sunlight.

Applications

3DSPRO finds people using Premium Clear Resin to make functional parts and prototypes in the following industries and applications.

Artwork and toys:

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

Consumer electronics appliances:

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

Electromechanical equipment:

Industrial display panels, switches, sockets, power tools, electrical instruments, experimental instruments, measuring tools, prototypes for air/fluid flow analysis, etc.

Home supplies:

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