

## 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 smooth surface finishing. This material is the clear choice for applications that require transparent feature.

#### Advantages

Clear transparent material that builds parts with outstanding clarity. Water resistance with improved strength and dimension retention in humid condition. Tough and durable. Translucent option also available.

#### Disadvantages

Air bubbles maybe 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 finishing.

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

## 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 Premium Clear Resin 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, prototype for air/fluid flow analysis, etc.

### ***Home supplies:***

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