



Sculpt - High Temp Resin

Grey/Clear

Sculpt Grey and Clear: Pinpoint Precision, 180°C Heat Resistance.

Sculpt Grey and Clear combine high resolution and low shrinkage to deliver the exact tolerances needed for accurate functional prototypes. Built for extreme environments, these engineering resins boast strong chemical resistance and can withstand high temperatures up to 180°C.

Ideal for:

- Low-run injection molds
- Vacuum forming
- Dental Application
- Artistic sculptures
- Designed for vulcanized rubber process

Property Data

Mechanical Properties	Measure	Method
Tensile Stress at Yield (Mpa)	39	ASTM D638
Tensile Stress at Break (%)	35	ASTM D638
Young's Modulus (MPa)	3500	ASTM D638
Elongation at Break(%)	5	ASTM D638
Flexural Modulus (Mpa)	3300	ASTM D790
Flexural Stress at Yield (MPa)	40	ASTM D790
Flexural Strain at Break(MPa)	1.2	ASTM D790

Other Properties	Measure	Method
HDT at 0.455 MPa	160	ASTM D648
Shore Hardness (D)	90D	ASTM D2240
Solid Density g/cm3	1.2	ASTM 792
Water Absorption (24hr)	0.50%	ASTM D570
Refractive index (For Clear only)	1.5	ASTM D648

Liquid Properties	Measure	Method
Viscosity at 25°C (77°F)	650	ASTM D7867
Liquid Density	1.13	ASTM D1475

Work Flow

Printing

Material Name	Sculpt High-Temp Resin (Grey/Clear)
Primary Printer Compatibility	MSLA / LCD/ DLP 3D Printers
Secondary Printer Compatibility	385nm - 405nm 3D Printers
Hardware Requirement	Access to exposure control is required
Supported Slicer Software	Chitubox, Lychee Slicer, Anycubic Photon Workshop, Blueprint Studio, Elegoo Satellite
Slicer Profiles Download	Siraya Tech Print Settings Download

Clean

Cleaning Step / Category	Instructions & Recommendations
Cleaning Solvents	• Preferred: 95% concentrated Ethanol or IPA. • Alternative: Methanol (must not contain acetone).
Cleaning Time	Submerge parts in the solvents for 2-3 minutes, using the ultrasonic cleaner.
Submersion Limit	Do not submerge parts in alcohol for more than 5 minutes.
Extra Step	For complex model, use a painter brush (or any brush made with hair) to gently remove excess resin from the printed part.

Work Flow

Drying

Drying	Remove alcohol by using an oven for 7-8 minutes (using a hair dryer requires 10 minutes)
	Note: For complex parts with cavities, repeat the clean/dry cycle multiple times.
Quality Check	Touch the dried surface. If it is still sticky, wash and dry the part again until smooth.

Post Curing

Step / Factor	Instructions & Recommendations
Preparation	Ensure the resin is completely cleaned off and absolutely no alcohol is left on the print before curing.
UV Specifications	Use a UV light source with a wavelength of 395-405nm.
Curing Time	Cure for approximately 15 minutes to reach optimal strength. Parts must be fully cured before use.
Recommended Method	Direct curing without water for moisture control.