



Siraya Tech

Technical Data Sheet

Siraya Tech Sculpt High-Temperature Resin

Clear/Grey



Product Introduction

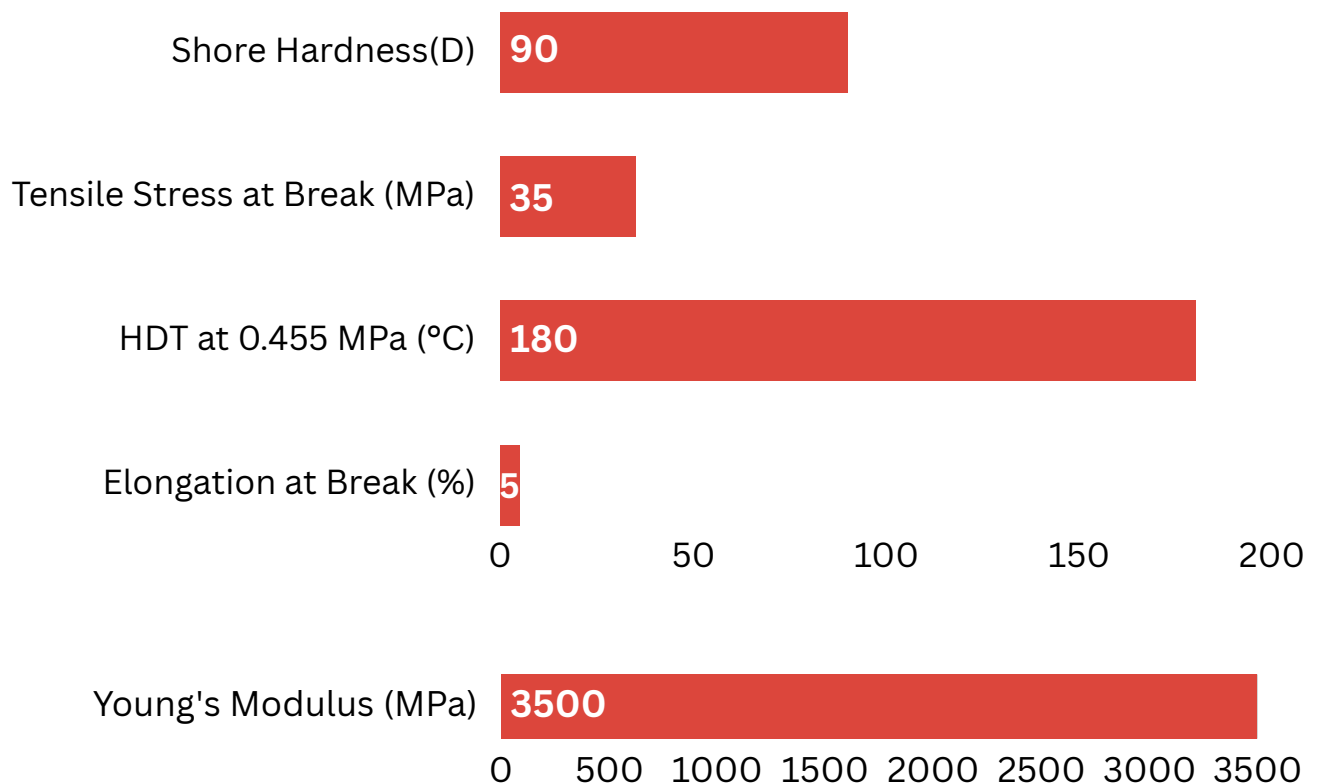
Sculpt High Temperature Resin

Key Features

- High resolution and low shrinkage for detailed and accurate prints
- High tolerance and precision for functional parts and prototypes
- High-temperature resistance of 180C
- Strong chemical resistance

Application:

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



Property Data

Mechanical Properties	Measure	Method	Post Processed
Tensile Stress at Yield	39	ASTM D638	-
Tensile Stress at Break	35	ASTM D638	-
Young's Modulus	3500	ASTM D638	-
Elongation at Break	5	ASTM D638	-
Flexural Modulus	3300	ASTM D790	-
Flexural Stress at Yield	40	ASTM D790	-
Flexural Strain at Break	1.2	ASTM D790	-

Other Properties	Measure	Method	Post Processed
HDT at 0.455 MPa	180	0.455 MPa	-
IZOD Impact (Notched) J	-	-	-
Shore Hardness	90D	-	-
Solid Density	1.2	-	-
Water Absorption (24hr)	0.5%	-	-
Refractive index (For Clear only)	1.5		

Liquid Properties	Measure	Method	Post Processed
Viscosity at 25°C (77°F)	650	25°C (77°F)	-
Liquid Density	1.13	-	-

Work Flow

Printing

Sculpt resin is a high-quality 3D printing material that offers exceptional ease of use and sandability. Specifically optimized for LCD/DLP printing, it is compatible with the Moonray printer and offers outstanding results for printing tabletop minis, digital sculptures, and other applications that require high-temperature resistance.

To achieve optimal results with Sculpt High Temperature resin, you need to use the appropriate slicer profiles for your printer model and software. You can download the slicer profiles for Chitubox and Lychee slicers from this link:

<https://siraya.tech/pages/print-settings-download>

Clean

Here are some tips for cleaning your printed parts:

- To remove excess resin from the printed part, use a painter brush or any brush made with hair. Then, clean the part with 95% concentrated ethanol or IPA.
- After cleaning for 2-3 minutes, use a hair dryer or air blower to remove the alcohol. For complex parts with many cavities, multiple cleaning and drying cycles may be necessary.
- You can check by touching the dried surface of the part to see if it is still sticky. If the dried surface is still sticky, wash it some more and dry it again.

Post Curing

Here are some tips for post-curing your printed parts:

- Sculpt resin reaches its optimal strength when the printed part is post-cured with UV after cleaning.
- Use 395-405nm UV light and cure for about 15 minutes.
- Make sure the resin is completely cleaned off and there is no alcohol left on the print before curing
- The printed part needs to be fully cured before use. We recommend direct curing without water. While submerging the print in water can increase curing efficiency, it can cause issues with high-temperature use (over 100°C) due to water absorption and steam generation. If you choose to cure with water submersion, you must thoroughly dry the part in an oven (80°C) for 2-3 hours before use.