

Technical Data Sheet

Siraya Tech

High-Temperature Resin Sculpt Ultra

Ultra White



Product Introduction

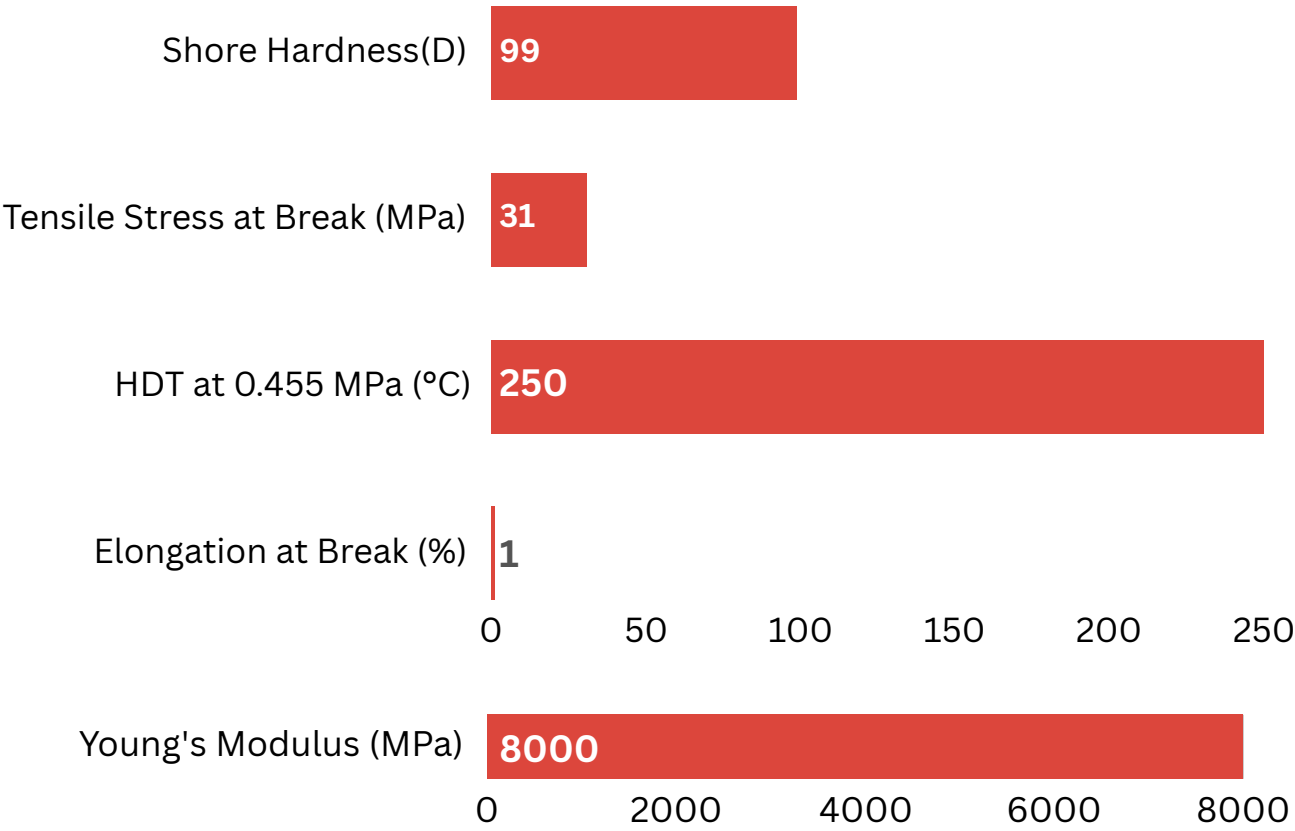
Sculpt High Temperature Resin

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 250C
- Very strong chemical resistance due to ceramic composite
- Very low water absorption rate.

Application:

- 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	33	ASTM D638
Tensile Stress at Break	31	ASTM D638
Young's Modulus	8000	ASTM D638
Elongation at Break	1	ASTM D638
Flexural Modulus	7500	ASTM D790
Flexural Stress at Yield	120	ASTM D790
Flexural Strain at Break	14	ASTM D790

Other Properties	Measure	Method
HDT at 0.455 MPa	250	ASTM D648
IZOD Impact (Notched) J	22	ASTM D256
Shore Hardness	99D	ASTM D2240
Solid Density	1.6	ASTM 792
Water Absorption (24hr)	0.01%	ASTM D570

Property Data

Liquid Properties	Measure	Method
Viscosity at 25°C (77°F)	650	ASTM D7867
Liquid Density	1.22	ASTM D1475

Product Specifications	Detail
Name	Sculpt Ultra
Color	Ultra White
SKU	ST0022
Net weight (KG)	1
Gross weight (KG)	1.3
Capacity (ml)	820
Package Dimensions	22*10*10 cm

Work Flow

Before Printing

Steps	Key Point
1	Before opening the bottle for the first time, warm up the bottle, then turn it over for 10, then shake it up and down for 1-2 minutes.
2	Please keep the print temperature at 25-30 °C.
3	Before printing Sculpt Ultra, shake it up and down for 1-2 minutes.
4	Use a plastic scraper to mix up the resin already in the vat.

Printing Profile

Printer	Download Link
Anycubic	Setting Profile
Creality	
Elegoo	
Phrozen	
More...	

Work Flow

Profile Import Steps

Slicer	Link
Chitubox V1	View Now
Chitubox V2	View Now
Lychee	View Now

Clean and Dry

Steps	Key Point
1	Prepare 90% or higher concentrated Ethanol or IPA (Isopropyl Alcohol)
2	Use the ultrasonic cleaner to clean for 5 minutes
3	Use compressed air or a hair dryer on a cool setting to dry the part thoroughly after cleaning
4	Check the dried surface by touch - if it feels sticky, clean and dry again
Tips:	1. A hair-based brush can be used to clean the resin more effectively. 2. Drying in an oven at 45-50°C for 5 minutes will give better results.

Work Flow

Post-Curing

Steps	Key Point
1	Ensure the part is completely clean and dry before post-curing.
2	Use a 395-405nm UV light source for curing
3	Cure for approximately 15 minutes

Sanding

Preparation	1000 grit sandpaper and mineral oil or water
Tips	Mineral oil adds luster

Mold Release Eecommodation

1	Mold Release 1
2	Mold Release 2
Tips	Our User has said that Rustoleum Clear Coat Engine Enamel worked well as a release coating.
Explanation	Sculpt Ultra is different from metal mold and the normal Sculpt Mold. 1. Sculpt Ultra is made with composite and has a rougher surface. 2. This rougher surface leads to a stronger grip on the injected material. 3. Mold releases and coating can fill in those tiny surface valleys so it has less grip to the parts.