



Siraya Tech

Technical Data Sheet

Siraya Tech Blu Lava Black Tough Resin



Product Introduction

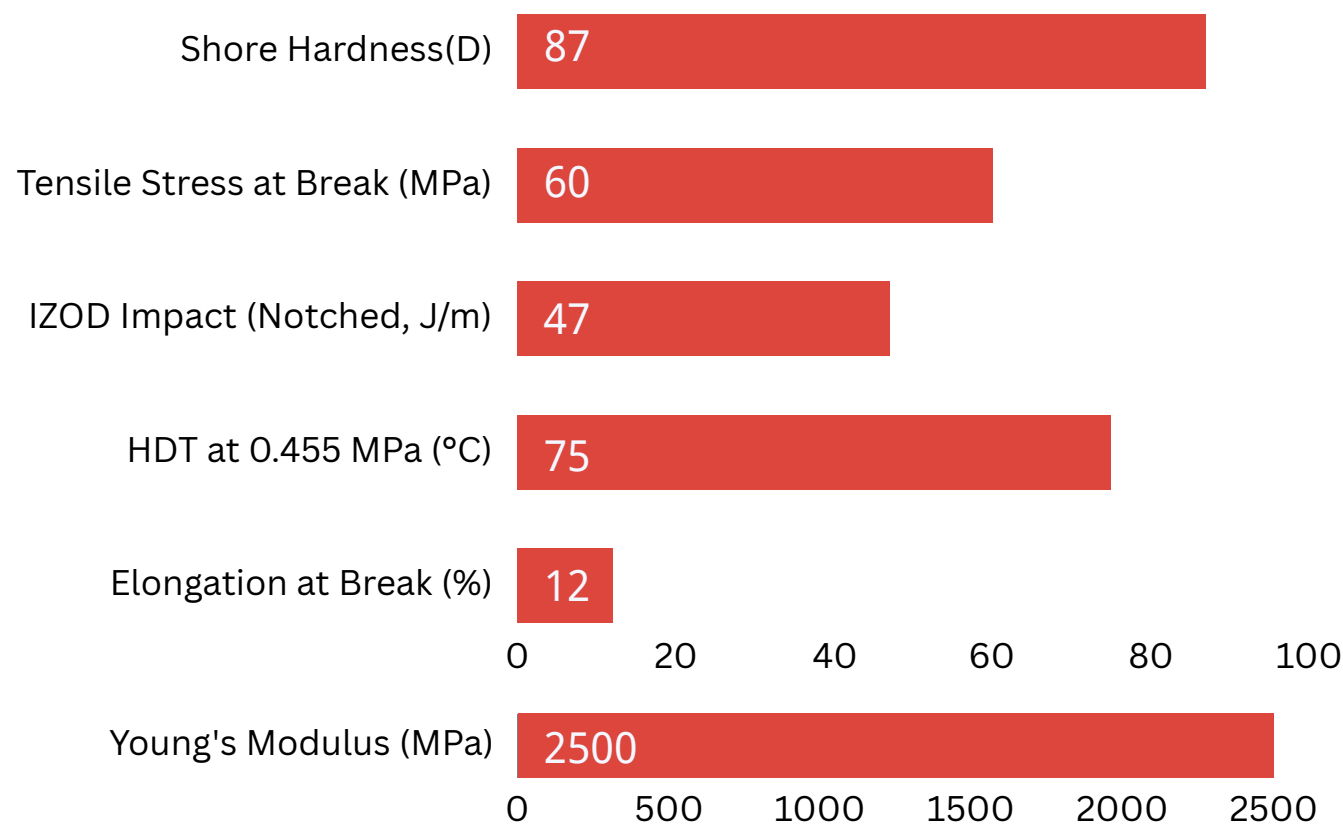
Blu Nylon - Tough Resin

Key Features

- Exceptional Strength and Stiffness: Engineered for PC-like strength;
- High-Resolution Prints: Provides precise, high-quality prints;
- Excellent Impact Resistance and Tappability;
- Biocompatibility: Certified under ISO 10993-5 / 10993-10.

Application:

- Engineering Prototypes
- End-Use Parts
- Medical Device Prototypes
- Parts that require both strength and precision



Property Data

Mechanical Properties	Measure	Method	Post Processed
Tensile Stress at Yield	65	ASTM D638	-
Tensile Stress at Break	60	ASTM D638	-
Young's Modulus	2500	ASTM D638	-
Elongation at Break	12	ASTM D638	-
Flexural Modulus	2600	ASTM D790	-
Flexural Stress at Yield	65	-	-
Flexural Strain at Break	-	-	-

Other Properties	Measure	Method	Post Processed
HDT at 0.455 MPa	75	0.455 MPa	-
IZOD Impact (Notched) J	47	-	-
Shore Hardness (D)	87	-	-
Solid Density	1.15	-	-
Water Absorption (24hr)	2%	-	-
Biocompatibility	√	10993-10	Link to certification

Liquid Properties	Measure	Method	Post Processed
Viscosity at 25°C (77°F)	1600	25°C (77°F)	-
Liquid Density	1.1	-	-

Work Flow

Printing

Blu Lava Black PC-like resin is a versatile material that can be used with different types of 3D printers. It is specially designed for MSLA/LCD printers yet, it can also be printed on some of the 405nm SLA and DLP printers if you have access to exposure control.

To achieve optimal results with Blu Lava Black 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

Due to Blu Lava Black's higher viscosity, thorough cleaning is crucial:

- After printing, let the part drain thoroughly over the vat for at least 10 minutes.
- Use an ultrasonic cleaner with 90% or higher concentrated Ethanol or IPA (Isopropyl Alcohol) to clean for 10 minutes.
- After cleaning, use compressed air or a hair dryer on a cool setting to thoroughly dry the part.
- Check the dried surface by touch - if it feels sticky, clean and dry again.

Post Curing

- Ensure the part is completely clean and dry before post-curing.
- Use a 395-405nm UV light source for curing.
- Cure for approximately 15-20 minutes, rotating the part every 5 minutes for even exposure.
- For optimal results, submerge the part in water during curing to increase efficiency.

Storage

- Store Blu Lava Black in a cool, dark place away from direct sunlight.
- Keep the bottle tightly sealed when not in use.
- Use within the recommended shelf life for best results.