



# Siraya Tech

## Technical Data Sheet

# Siraya Tech Tenacious Flexible Resin

Flex Black



# Product Introduction

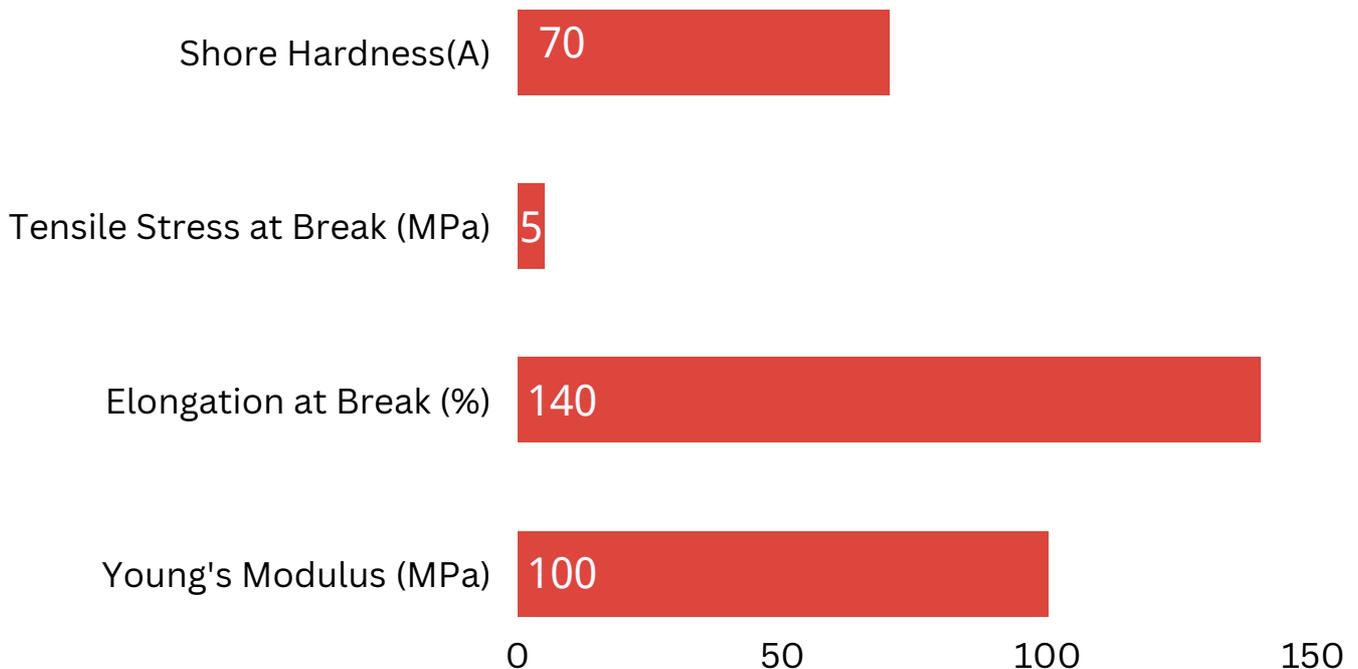
## Tenacious Flex Black

### Key Features

- Tenacious Flex Black Resin is a highly versatile and durable 3D printing resin that offers excellent impact resistance, flexibility, toughness, and precision.
- Faster Rebound - It has a faster rebound than the original Tenacious resin and incredible elasticity that allows it to resume its shape after any externally forced deformation quickly.
- High Impact Resistance - Tenacious Flex 3D printer resin is designed to keep your models resilient and protected with exceptional impact resistance, preventing deformations or cracks from accidental drops or chipping.

### Application:

- Robot application
- O-rings and gaskets
- Flexible functional parts
- Impact-resistant functional parts



# Property Data

Mechanical Properties	Measure	Method	Post Processed
Tensile Stress at Yield	5	ASTM D638	-
Tensile Stress at Break	5	ASTM D638	-
Young's Modulus	100	ASTM D638	-
Elongation at Break	140	ASTM D638	-
Flexural Modulus	-	-	-
Flexural Stress at Yield	-	-	-
Flexural Strain at Break	-	-	-

Other Properties	Measure	Method	Post Processed
HDT at 0.455 MPa	-	-	-
IZOD Impact (Notched) J	-	-	-
Shore Hardness (A)	70	-	-
Solid Density	1.2	-	-
Water Absorption (24hr)	2%	-	-
Biocompatibility	Not Tested	-	-

Liquid Properties	Measure	Method	Post Processed
Viscosity at 25°C (77°F)	400	25°C (77°F)	-
Liquid Density	1.1	-	-

# Work Flow

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## Printing

Tenacious Resin is a flexible resin material that is widely compatible with MSLA/LCD 3D printers. It can also print on some 405nm SLA/DLP printers if you have access to exposure controls.

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

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

## Clean

Here are some tips for cleaning your printed parts:

- Use a painter brush (or any brush made with hair) to remove excess resins from the printed part.
- Use 95% concentrated Ethanol (preferred) or IPA to clean. Some forms of methanol should work but make sure they do not contain acetone.
- After 2-3 minutes of cleaning action, remove the alcohol with a hair dryer or air blower.
- For complex parts with lots of cavities, it may be a good idea to clean and dry them multiple times.
- Check the dried surface of the part by touching it to see if it is still sticky. If the dried surface is still sticky, wash it again and dry it again.

## Post Curing

- Here are some tips for post-curing your printed parts:
- Tenacious reaches its optimal strength when the printed part is post-cured with UV after cleaning.
- Use 395-405nm UV light and cure for about 25 minutes.
- Make sure the resin is completely cleaned off and there is no alcohol left on the print before curing.
- Curing by submerging the object in water will significantly increase curing efficiency.