






Description
 Tough Resin was designed to simulate ABS, with comparable tensile strength and modulus. It is a sturdy, shatter-resistant material that was developed to withstand high stress and strain. When it yields, it will undergo deformation rather than immediately shattering. It is a great choice for “works-like” prototypes.

Uses
 Assembly prototyping
 Fit testing
 Functional prototyping

Colors


Material Properties

Tensile Strength		Flexibility	
Brittleness		Durability	

	Metric	Imperial
Mechanical Properties		
Ultimate Tensile Strength	55.7 MPa	8080 psi
Tensile Modulus	2.8 GPa	387 ksi
Elongation at Break	24 %	24 %
Flexural Strength at 5% Strain	60.6 MPa	8790 psi
Flexural Modulus	1.6 GPa	241 ksi
Notched IZOD	38 J/m	0.71 ft-lbf/in
Temperature Properties		
Heat Deflection Temp @ 1.8 MPa	45.9 °C	114.6 °F
Heat Deflection Temp @ 0.45 MPa	48.5 °C	119.3 °F
Thermal Expansion (23 °C to 50 °C)	119.4 µm/m/°C	66.3 µm/in/°F

**Data was obtained from Formlabs technical data sheets at formlabs.com