

ToughONETM

Technology: PolyJetTM



Material Description:

ToughONETM is a PolyJetTM photopolymer material designed for functional 3D printing, delivering a balanced combination of strength, toughness, and precision. ToughONE bridges the gap between high-detail visual prototypes and durable functional parts, enabling accurate testing of form, fit, and mechanical performance.

Benefits:

- High tensile strength and impact resistance compared to standard PolyJet materials.
- Excellent surface finish and fine feature resolution typical of PolyJetTM technology.
- Balanced stiffness and elongation for durable, tough functional prototypes.
- Consistent mechanical performance with optional post-curing for enhanced properties.
- Ideal transition material from visual models to functional testing parts.

Applications:

- Functional prototypes requiring strength and toughness
- Snap-fit assemblies and enclosures
- Housings, brackets, and mechanical components
- Design verification and form-fit testing
- Low-load functional testing and validation models

Mechanical Properties

PROPERTY	ASTM	METRIC UNITS
Tensile Strength	D63804	38 – 42 MPa
Elongation Break (%)	D63805	45 – 55 %
Flexural Strength	D79003	55 – 64 MPa
Flexural Modulus	D79004	1600 – 1800 Mpa
IZOD Impact Strength (notched)	D25606	40 – 55 J/m
Heat Deflection Temperature @ 0.45 MPa/66 psi, (°C)	D64806	47 – 50 C
Shore Hardness	(Scale D)	80 - 82

Ready to print with ToughONETM?

Contact our team at info@addmangroup.com or visit addmangroup.com

