

ToughONE™

Highest Impact Resistance

ToughONE™ expands the capabilities of PolyJet™ technology, bridging the gap between visual appeal and functional performance. Now, you can seamlessly transition from form-fit visual prototypes to robust functional prototypes, making it the ideal choice for industries demanding both strength and precision.

Note: Material properties may vary depending on printing parameters and post-processing conditions.

Material Specifications			
Mechanical Properties	Test Method	Without Curing	Post Cure: 12 hr., 45 °C
Tensile Modulus	ASTM D-638-04	2300-2500 MPa (333-362 psi)	2300-2500 MPa (333-362 psi)
Tensile Strength	ASTM D-638-03	38-42 MPa (5.5-6.1 psi)	48-53 MPa (7.0-7.7 psi)
Elongation at Break	ASTM D-638-05	45-55%	45-55%
Flexural Modulus	ASMT D-790-04	1600-1800 MPa (232-261 psi)	2100-2400 MPa (305-348 psi)
Flexural Strength	ASTM D-790-03	55-64 MPa (8.0-9.3 psi)	77-87 MPa (11.2-12.6 psi)
Izod Impact Unnotched	ASTM D-4812	1100-1350 J/m (20.6-25.2 ft lb/in)	1000-1250 J/m (18.7-23.4 ft lb/in)
HDT @ 0.45 MPa	ASTM D-646-06	47-50 °C (116.6-122 °F)	59-62 °C (138.2-143.6 °F)
Tg	ASTM DMA, E"	51 °C (132.8 °F)	74 °C (165.2 °F)
Shore Hardness	Scale D	72	74

System Availability	Layer Thickness Capability	Support Structure	Available Color
J826™ Prime	14 microns (0.00055 in.), depending on print mode	SUP705 (WaterJet removable)	White
J850™ Prime		SUP706B (soluble + WaterJet removable)	
J850 Pro			
J850™ Digital Anatomy	14 microns (0.00055 in.), depending on print mode	SUP705 (waterjet removable) SUP706B (soluble) GelMatrix (waterjet removable)	White