



Clear

Photopolymer Resin for Form 1+

MATERIAL PROPERTIES

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To the best of our knowledge the information contained herein is accurate. However, Formlabs, Inc. makes no warranty, expressed or implied regarding the accuracy of these results to be obtained from the use thereof.

Formlabs Clear Resin produces strong plastic parts ideal for a wide variety of applications and is specifically designed to work with your Form 1+ 3D Printer. This material can be easily painted, and when the surface is finished or coated, produces a highly clear part. Upon post-cure, tensile strength and stiffness exceeds that of injection-molded or 3D-printed ABS.

	METRIC ¹		IMPERIAL ¹		METHOD
	Green ²	Postcured ³	Green ²	Postcured ³	
Tensile Properties					
Tensile Strength at yield	29.8 ² MPa	61.5 ³ MPa	4320 psi	8920 psi	ASTM D 638-10
Young's Modulus	1.3 GPa	2.7 GPa	191 ksi	392 ksi	ASTM D 638-10
Elongation at Failure	20%	5%	20%	5%	ASTM D 638-10
Flexural Properties					
Flexural Modulus	0.97 GPa	2.38 GPa	140 ksi	345 ksi	ASTM D 790-10(A)
Impact Properties					
Notched IZOD	22 J/m	29 J/m	0.406 ft-lbf/in	0.537 ft-lbf/in	ASTM D 256-10
Temperature Properties					
Heat deflection temp. @ 66 psi	52 °C	78 °C	126 °F	172 °F	ASTM D 648-07
Heat deflection temp. @ 200 psi	47 °C	60 °C	117 °F	140 °F	ASTM D 648-07
5% Wt loss temperature	247 °C	274 °C	477 °F	525 °F	ASTM E 1131

NOTES:

¹Material properties can vary with part geometry, print orientation, print settings and temperature.

²Data was obtained from green parts, printed using 50 µm Clear settings, without additional treatments.

³Data refers to post-cured properties obtained after exposing green parts to 15 J/cm² of UV light.