



POLYJET™ PHOTOPOLYMERS

PolyJet™ photopolymers combine a wide variety of material properties with thin layers, so you can create true product realism in your prototypes. PolyJet™ 3D Printers are the only additive manufacturing systems in the world that give you multi-material flexibility.



	Materials Simulating Plastics		Polypropylene like	Vero - Rigid					Tango – Rubber-like		Digital Materials
MATERIAL	Digital ABS (RGD5160-DM)	Transparent PolyJet (RGD720)	DurusWhite (RGD430)	VeroClear (RGD810)	VeroWhitePlus (RGD835)	VeroBlackPlus (RGD875)	VeroBlue (RGD840)	VeroGray (RGD850)	TangoPlus (FLX930, FLX980)	TangoBlack (FLX973)	
Unique Properties	Functionality of ABS with fine surface finish	Smooth surface, fine feature detail, semi-tr	Appearance, flexibility and strength	Rigid, clear, transparent	Fine feature detail	Higher flexural strength and heat deflection than VeroWhite	Most durable of all Vero materials	Dimensional stability	Maximum elasticity, Rubber-like	Flexible	
Available Colors	■ Green	□ Semi-clear	■ Milky white	□ Transparent	□ White	■ Black	■ Blue	■ Gray	□ Semi-translucent ■ Natural (FLX930) ■ Black (FLX980)	■ Black	
Tensile Strength ^{1,2}	8,000-8,700 psi ¹ (55-60 MPa)	7,250-9,450 psi (50-65 MPa)	2,900-4,350 psi ¹	7,250-9,450 psi ¹ (50-65 MPa)	7,221 psi ¹ (49.8 MPa)	7,352 psi ¹ (50.7 MPa)	7,250-8700 psi (50-60 MPa)	7,250-9,450 psi ¹ (50-65 MPa)	115-220 psi ² (0.8-1.5 MPa)	115-350 psi ² (1.8-2.4 MPa)	
Tensile Elongation	25-40%	15-25%	40-50%	10-25%	15-25%	15-25%	15-25%	10-25%	170-220%	45-55%	
Flexur Strength (psi)	9,500-11,000 (65-75 MPa)	12,000-16,000 (80-110 MPa)	4,350-5,800 (30-40 MPa)	11,000-16,000 (75-110 MPa)	10,817 (74.6 MPa)	11,542 (79.6 MPa)	8,700-10,200 (60-70 MPa)	11,000-16,000 (75-110 MPa)	—	—	
IZOD Impact, notched (ft-lb/in)	1.22-1.5 (65-80 J/m)	0.375-0.562 (20-30 J/m)	0.749-0.937 (40-50 J/m)	0.375-0.562 (20-30 J/m)	0.45 (24.1 J/m)	0.45 (23.9 J/m)	0.375-0.562 (20-30 J/m)	0.375-0.562 (20-30 J/m)	—	—	
Shore Hardness	Scale D (85-87)	Scale D (83-86)	Scale D (74-78)	Scale D (83-86)	Scale D (83)	Scale D (83)	Scale D (83-86)	Scale D (83-86)	Scale A (26-28)	Scale A (60-62)	
Heat Deflection (At 0.45 MPa)	136-154°F (58-68.4°C)	113-122°F (45-50°C)	99-108°F (37-42°C)	113-122°F (45-50°C)	109°F (43°C)	117°F (47°C)	113-122°F (45-50°C)	113-122°F (45-50°C)	—	—	



¹ Tensile strength data is based on ASTM standard D-638.

² Tango Photopolymer tensile strength data is based on ASTM standard D-412.

*The data presented are typical values intended for reference and comparison purposes only. It should not be used for design specifications or quality control purposes. End-use material performance can be impacted (+/-) by, but not limited to, part design, end-use conditions, test conditions, etc. Actual values will vary with build conditions. Product specifications are subject to change without notice. In the online world, potential color variances can occur between what's seen onscreen and your prototyping / direct digital manufacturing project.

**Actual surface resistance (and volume resistance) may vary from 109 to 106, based upon part geometry, build style, and finishing techniques.