



PolyJet Flex & PolyJet Over-Mold

POLYJET MATERIAL SPECIFICATIONS

Highlights

- Ideal for precise models, complex shapes and intricate details
- Durable and tear resistant with smooth surface finish
- Wide range of simulated Shore A elastomers (30A - 95A)
- Black 30A is also known as “AGILUS30 BLACK (FLX9840)”

Applications

- Design validation and rapid prototyping
- Uses include realistic simulation of rubber parts, soft-touch parts, non-slip surfaces, rubber-like surrounds and over molding, knobs, seals, gaskets, wearables, masks, covers, living hinges, jigs, fixtures and human anatomy

POLYJET FLEX TYPICAL PHYSICAL PROPERTIES

PRIMARY MATERIAL: AGILUS30 (FLX2040) / AGILUS30 BLACK (FLX9840) | SECONDARY MATERIAL: VERO

MECHANICAL PROPERTIES	TEST METHOD	FLX9740 FLX9840	FLX9750 FLX9850	FLX9760 FLX9860	FLX9770 FLX9870	FLX9785 FLX9885	FLX9795 FLX9895
Color	Visual	Black	Black	Black	Black	Black	Black
Tensile Strength	ASTM D-412	3-4 MPa	3-4 MPa	3.5-4.5 MPa	4-6 MPa	6-10 MPa	10-14 MPa
Elongation at Break	ASTM D-412	190-210%	170-210%	150-170%	120-140%	70-90%	50-70%
Shore Hardness (A)	ASTM D-2240	40-50A	50-55A	55-60A	60-70A	80-85A	85-90A
Tensile Tear Resistance	ASTM D-624	6.0-8.0 Kg/cm	7.0-9.0 Kg/cm	7.0-10.0 Kg/cm	12.0-14.0 Kg/cm	22.0-26.0 Kg/cm	26.0-30.0 Kg/cm

*PolyJet Flex black parts may vary in color shade between builds. PolyJet Over-Molded products include rigid VeroWhitePlus material with your choice of a PolyJet Flex material.

VEROWHITEPLUS TYPICAL PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
Color/Appearance	Visual	White	White
Tensile Strength	ASTM D638	8,350 psi	58 MPa
Elongation at Break	ASTM D638	10% - 25%	10% - 25%
Modulus of Elasticity	ASTM D638	362,500 psi	2,500 MPa
Flexural Strength	ASTM D790	13,500 psi	93 MPa
Flexural Modulus	ASTM D790	392,500 psi	2,700 MPa
Izod Notched Impact	ASTM D256	0.47 ft-lb/in	25 J/m
Shore D Hardness	-	85 D	85 D
Heat Deflection Temperature	ASTM D648 @ 264 psi	118°F	48°C
Heat Deflection Temperature	ASTM D648 @ 66 psi	118°F	48°C

*PolyJet Over-Mold parts require a total of 2 separate STL files. The 2 files are the “part” (solid substrate material) and the “over-mold” (elastomeric Shore A material) files in the correct assembled relationship to one another in CAD space.

The information presented represents 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, color etc. Actual values will vary with build conditions. Product specifications are subject to change without notice.

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