

HiFill® PETG 1701 3DP

 Techmer Polymer Modifiers - *Polyethylene Terephthalate Glycol Comonomer*
General Information
Product Description

HiFill® PETG 1701 3DP is a specially formulated, glass fiber filled, and compounded thermoplastic material designed for general purpose additive manufacturing applications. This product has been optimized for maximum printability in additive manufacturing.

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber
Processing Method	• 3D Printing

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.50		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			ASTM D638
.. ³	791000	psi	
.. ⁴	387000	psi	
.. ²	1.20E+6	psi	
Tensile Strength			ASTM D638
Yield ³	10200	psi	
Yield ⁴	4880	psi	
Yield ²	14000	psi	
Tensile Elongation			ASTM D638
Break ³	0.020	%	
Break ⁴	0.010	%	
Break ²	2.5	%	
Flexural Modulus ²	1.10E+6	psi	ASTM D790
Flexural Strength ²	21500	psi	ASTM D790
Poisson's Ratio ³	0.37		
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact ³	1.5 ft·lb/in		ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load ² (66 psi, Unannealed)	170	°F	ASTM D648
Additional Information	Nominal Value	Unit	Test Method
Recommended Print Bed	Heated aluminum bed with cement glue, PC sheet, glass expoy laminate board, pellet coated bead board		
Recommended Print Bed Temperature	248 to 266	°F	

Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	170	°F
Drying Time	1.0 to 6.0	hr
Cylinder Zone 1 Temp.	370 to 400	°F
Cylinder Zone 2 Temp.	380 to 420	°F
Cylinder Zone 3 Temp.	420 to 460	°F
Cylinder Zone 4 Temp.	420 to 460	°F
Melt Temperature	410 to 460	°F
Die Temperature	420 to 480	°F

Extrusion Notes

If material is to remain in dryer for more than 6 hours in dried state, reduce dryer temperature to 100°F to prevent degradation of material.

