

HiFill® ABS 1511 3DPTechmer Polymer Modifiers - *Acrylonitrile Butadiene Styrene***General Information****Product Description**

HiFill® ABS 1511 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
Uses	• Additive Manufacturing (3D Printing)
Processing Method	• 3D Printing

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.20E+6	psi	ASTM D638
Tensile Strength (Yield)	11000	psi	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	1.10E+6	psi	ASTM D790
Flexural Strength	14000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.0	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	205	°F	ASTM D648
Additional Information	Nominal Value	Unit	Test Method
Recommended Print Bed	Aluminum bed with cement glue or Kapton tape, glass epoxy laminate board, or PEI sheet		
Recommended Print Bed Temperature	194 to 230	°F	

Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	185	°F
Drying Time	2.0 to 4.0	hr
Cylinder Zone 1 Temp.	475 to 510	°F
Cylinder Zone 2 Temp.	500 to 530	°F
Cylinder Zone 3 Temp.	500 to 530	°F
Cylinder Zone 4 Temp.	510 to 550	°F
Melt Temperature	500 to 560	°F
Die Temperature	520 to 560	°F

Extrusion Notes

If drying for longer than 6 hours, recommend reducing the temperature to 140°F in a dessiccant dryer to avoid degradaton of the material.

Notes

¹ Typical properties: these are not to be construed as specifications.

