

Electrafil® PA12 2412 3DP

Techmer Polymer Modifiers - *Polyamide 12*

General Information

Product Description

Electrafil® PA12 2412 3DP is a specially formulated, black colored, 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	• Carbon Fiber
Uses	• Additive Manufacturing (3D Printing)

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.10		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	12000	psi	ASTM D638
Tensile Elongation (Break)	8.0	%	ASTM D638
Flexural Modulus	650000	psi	ASTM D790
Flexural Strength	15000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.5	ft-lb/in	ASTM D256
Additional Information	Nominal Value	Unit	Test Method
Recommended Print Bed	Glass epoxy sheet, PEI sheet, heated aluminum bed, beadboard		
Recommended Print Bed Temperature	120 to 140	°F	

Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 6.0	hr
Cylinder Zone 1 Temp.	410 to 450	°F
Cylinder Zone 2 Temp.	420 to 460	°F
Cylinder Zone 3 Temp.	440 to 480	°F
Cylinder Zone 4 Temp.	450 to 500	°F
Melt Temperature	460 to 520	°F
Die Temperature	450 to 520	°F

Extrusion Notes

If drying for longer than 6 hours, recommend reducing the temperature to 100°F in a dessiccant dryer to avoid degradaton of the material.

Notes

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

