

Electrafil® PA6/10 CF45 IM BK

Techmer Polymer Modifiers - Polyamide 610

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber, 45% Filler by Weight
Additive	• Impact Modifier
Features	• Impact Modified
Appearance	• Black
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.26		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3.40E+6	psi	ASTM D638
Tensile Strength (Yield)	21000	psi	ASTM D638
Tensile Strength (Break)	21000	psi	ASTM D638
Tensile Elongation (Break)	3.3	%	ASTM D638
Flexural Modulus	1.75E+6	psi	ASTM D790
Flexural Strength	38000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	4.0	ft-lb/in	ASTM D256
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+4	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 3.0	hr
Rear Temperature	460 to 490	°F
Middle Temperature	470 to 500	°F
Front Temperature	480 to 510	°F
Nozzle Temperature	490 to 520	°F
Processing (Melt) Temp	470 to 520	°F
Mold Temperature	75 to 150	°F
Injection Rate	Slow	
Back Pressure	0.00 to 50.0	psi
Screw Speed	Slow-Moderate	

