

HiFill® POM HO CF15

Techmer Polymer Modifiers - Acetal (POM) Homopolymer

General Information
General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber
Features	• Homopolymer
Appearance	• Colors Available
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.47		ASTM D792
Molding Shrinkage - Flow (0.125 in)	7.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.25	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	9200	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	900000	psi	ASTM D790
Flexural Strength	15000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	0.80	ft·lb/in	ASTM D256
Unnotched Izod Impact (73°F, 0.125 in)	7.0	ft·lb/in	ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	84		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	320	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	300	°F	ASTM D648
Melting Temperature	329	°F	
CLTE - Flow	2.1E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+2 to 1.0E+4	ohms·cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	200	°F
Drying Time	2.0 to 3.0	hr
Rear Temperature	380 to 425	°F
Middle Temperature	380 to 425	°F
Front Temperature	380 to 425	°F
Processing (Melt) Temp	380 to 440	°F
Mold Temperature	180 to 220	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

