

HiFill FR® PPE/HIPS FR BK

Techmer Polymer Modifiers - *Polyphenylene Ether*

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Flame Retardant
Features	• Flame Retardant
Appearance	• Black
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.08		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	350000	psi	ASTM D638
Tensile Strength (Yield)	8900	psi	ASTM D638
Tensile Strength (Break)	7500	psi	ASTM D638
Tensile Elongation (Break)	15	%	ASTM D638
Flexural Modulus	370000	psi	ASTM D790
Flexural Strength	13000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	4.0	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	225	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.12 in)	V-1		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	500 to 540	°F
Middle Temperature	510 to 550	°F
Front Temperature	520 to 560	°F
Nozzle Temperature	530 to 570	°F
Processing (Melt) Temp	510 to 570	°F
Mold Temperature	160 to 220	°F
Injection Rate	Moderate	
Back Pressure	25.0 to 75.0	psi
Screw Speed	Slow-Moderate	

