

PEEK-SG101F80

Polyetheretherketone (PEEK)

TECHNICAL DATA SHEET

Description

Sciengy® PEEK-SGC101F80 is a 10% carbon fiber reinforced PEEK compound, easy flow, developed to provide higher strength, wear resistance, low coefficient of friction and chemical resistant.

CF10%, Easy Flow, Standard Carbon Fiber

Series	Glass fiber reinforced
ISO Designation	>PEEK-GF10<
Process Method	Injection molding

Properties

Physical	Value	Units	Test Standard
Density	1.34	g/cm ³	ISO 1183
Mold Shrinkage (Machine Direction)	0.20	%	GB/T 15585
Mold Shrinkage (Transverse Direction)	0.50	%	GB/T 15585
Water Absorption (23°C-sat)	0.30	%	ISO 62
Flammability(1.6 mm)	V-0		IEC60695
Mechanical	Value	Units	Test Standard
Tensile Stress at Break (5 mm/min)	205	MPa	ISO 527
Tensile Modulus at Break (1 mm/min)	13.0	GPa	ISO 527
Elongation at Break (23°C)	6.5	%	ISO 527
Flexural Modulus at Break (23°C)	9.5	GPa	ISO 178
Flexural Strength at Break	310	MPa	ISO178
Charpy Impact Strength @23°C (V-notched)	7.5	kJ/m ²	ISO 179
Thermal	Value	Units	Test Standard
Melting Temperature (10°C/min)	343	°C	ISO 11357
Heat Deflection Temp. High Load (1.8 MPa)	320	°C	ISO 75
Glass Transition (Tg)	150	°C	ISO 11357
Electrical Properties	Value	Units	Test Standard
Typical Processing Conditions	Value	Units	Test Standard
Drying Temp. / Time	150°C&3h or 120°C&5h(residual moisture<0.02%)		

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Injection Molding Melt Temp.	180℃~210℃	
Temperature Settings	375/385/390/395℃(Nozzle)	
Hopper Temperature	Not greater than 100℃	
Gate	>2mm or 0.5*part thickness	