

Technical Data Sheet

Schulatec PPS GF40 SF N1 BLK



Polyphenylene Sulfide

Product Description

40% glass fibre reinforced PPS compound

Processing Method

Injection Molding

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (300 °C/5.0 kg)	70	cm ³ /10 min	ISO 1133
Density, (Method A)	1.66	g/cm ³	ISO 1183
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	1.6	%	ISO 527-2
Flexural Modulus	16000	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	190	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	15000	MPa	ISO 527-1
Flexural Stress	270	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched, (Type 1, Edgewise, Notch A)	10	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched	40	kJ/m ²	ISO 179-1/1eU
Thermal			
Deflection Temperature Under Load Annealed (1.80 MPa), (Flatwise)	260	°C	ISO 75-2/A
Electrical			
Dielectric Strength, (in Oil, 1.00 mm, 23 °C, 2000 V/sec)	35	kV/mm	IEC 60243-1
Comparative Tracking Index (CTI)	175	V	IEC 60112
Flammable			
Burning Rate			
(2.00 mm)	0.0	mm/min	FMVSS 302
(2.00 mm)	0.0	mm/min	ISO 3795
Glow Wire Flammability Index, (1.5 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature, (1.5 sec)	850	°C	IEC 60695-2-13
UL Information			
Flame Rating, (1.5 mm)	V-0		UL 94

Injection Parameters	Nominal Value	Units
Drying Time	3.0 to 4.0	hr
Drying Temperature, (Dry Air Dryer)	130 to 140	°C
Screw Speed	40 to 100	rpm
Processing (Melt) Temp	300 to 330	°C
Mold Temperature	135 to 145	°C