

Technical Data Sheet

SCHULATEC[®] PPS TFF 5040

Polyphenylene Sulfide
Engineering Plastics

Product Description

40% glass fibre reinforced PPS compound with low wear properties

General

Processing Method • Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.69 g/cm ³	1.69 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (300°C/5.0 kg)	24 cm ³ /10min	24 cm ³ /10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	2.09E+6 psi	14400 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	22500 psi	155 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	1.5 %	1.5 %	ISO 527-2/1A/5
Flexural Modulus	2.19E+6 psi	15100 MPa	ISO 178
Flexural Stress	40600 psi	280 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength	4.0 ft·lb/in ²	8.5 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength	18 ft·lb/in ²	38 kJ/m ²	ISO 179/1eU
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature 264 psi (1.8 MPa), Annealed	509 °F	265 °C	ISO 75-2/Af
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Comparative Tracking Index	175 V	175 V	IEC 60112
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate ¹			
0.0787 in (2.00 mm)	0.0 in/min	0.0 mm/min	ISO 3795
0.0787 in (2.00 mm)	0.0 in/min	0.0 mm/min	FMVSS 302
Flame Rating (0.06 in (1.5 mm))	V-0	V-0	UL 94
Glow Wire Flammability Index			IEC 60695-2-12
0.06 in (1.5 mm)	1760 °F	960 °C	
Glow Wire Ignition Temperature (1.5 sec)	1560 °F	850 °C	IEC 60695-2-13

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature - Dry Air Dryer	266 to 284 °F	130 to 140 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Processing (Melt) Temp	572 to 626 °F	300 to 330 °C
Mold Temperature	275 to 293 °F	135 to 145 °C
Screw Speed	40 to 100 rpm	40 to 100 rpm