

Technical Data Sheet

Schuladur HT GF30 NAT

Polycyclohexylenedimethylene Terephthalate

Product Description

30% glass fibre reinforced PCT compound for high temperature applications

Processing Method	Injection Molding
Filler/Reinforcement	Glass Fiber, 30%
Resin ID	PCT GF 30

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (300 °C/2.16 kg)	20	cm ³ /10 min	ISO 1133
Density, (Method A)	1.44	g/cm ³	ISO 1183
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	2.0	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	8000	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	115	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	8500	MPa	ISO 527-1
Flexural Stress, (2.0 mm/min, 2.5%)	180	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	58	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	48	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature, (B (50N), 50 °C/h)	250	°C	ISO 306
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	250	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	550	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302

Injection Parameters	Nominal Value	Units
Drying Time	4.0 to 6.0	hr
Drying Temperature	120	°C
Suggested Max Moisture	0.03	%
Processing (Melt) Temp	295 to 310	°C
Mold Temperature	90 to 120	°C