Technical Data Sheet

Schuladur HT GF 30 FR 5 BLK 968001

Polycyclohexylenedimethylene Terephthalate

Product Description
30% glass fiber reinforced, flame retardant PCT

Processing Method	Injection Molding
Filler/Reinforcement	Glass Fiber, 30%
Resin ID	PCT GF30 FR(16)

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (300 °C/2.16 kg)	25	cm³/10 min	ISO 1133
Density, (Method A)	1.72	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	1.2	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	7750	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	100	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	11900	MPa	ISO 527-1
Flexural Stress, (2.0 mm/min, 1.6%)	142	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)	20	kJ/m²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	215	°C	ISO 306
(A (10N), 50 °C/h)	>250	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	>250	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	240	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	250	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
(2.00 mm, Self-Extinguishing)	0.0	mm/min	FMVSS 302

Glow Wire Flammability Index			
(0.75 mm)	960	°C	IEC 60695-2-12
(1.5 mm)	960	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(0.75 mm)	875	°C	IEC 60695-2-13
(1.5 mm)	875	°C	IEC 60695-2-13
(3.0 mm)	875	°C	IEC 60695-2-13
UL Information			
Flammability Classification			
(0.8 mm)	V-0		IEC 60695-11-10, -20
(1.6 mm)	V-0		IEC 60695-11-10, -20
(3.2 mm)	V-0		IEC 60695-11-10, -20

Injection Parameters	Nominal Value	Units
Drying Time	4.0 to 6.0	hr
Drying Temperature	100	°C
Suggested Max Moisture	0.03	%
Screw Speed	<250	mm/sec
Processing (Melt) Temp	290 to 310	°C
Injection Rate	Slow-Moderate	
Back Pressure	2.00 to 8.00	MPa
Mold Temperature	90 to 120	°C