Technical Data Sheet

Schuladur A GF 30 NAT

Polybutylene Terephthalate

Product Description
30% glass fibre reinforced PBT compound

Processing Method	Injection Molding
Attribute	Medium Viscosity
Filler/Reinforcement	Glass Fiber, 30%
Resin ID	PBT-GF

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (250 °C/2.16 kg)	18	cm³/10 min	ISO 1133
Density, (Method A)	1.53	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	2.5	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 5 mm/min)	130	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	10000	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	60	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	55	kJ/m²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	228	MPa	ISO 2039-1
Ball Pressure Test, (200 °C)	Pass		IEC 60695-10-2
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	213	°C	ISO 306
(A (10N), 50 °C/h)	218	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	215	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	205	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	350	V	IEC 60112

Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	39	mm/min	FMVSS 302
(2.00 mm)	39	mm/min	ISO 3795
Glow Wire Flammability Index			
(1.5 mm)	750	°C	IEC 60695-2-12
(3.0 mm)	750	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	775	°C	IEC 60695-2-13
(3.0 mm)	775	°C	IEC 60695-2-13
Oxygen Index	19	%	ISO 4589-2
Additional Information			
Water Absorption 23C/50RH	0.3	%	ISO 62
UL Information			
Flammability Classification			
(0.75 mm)	HB		IEC 60695-11-10, -20
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20
UL File Number	E86615		

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	120	°C
Suggested Max Moisture	0.05	%
Processing (Melt) Temp	250 to 260	°C
Mold Temperature	70 to 90	°C