Technical Data Sheet

Schuladur A GF15 HI NAT

Polybutylene Terephthalate

Product Description

15% glass fibre reinforced PBT compound providing high impact strength

Processing Method	Injection Molding
Attribute	Impact Modified
Filler/Reinforcement	Glass Fiber, 15%
Resin ID	PBT-GF

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (250 °C/2.16 kg)	15	cm³/10 min	ISO 1133
Density, (Method A)	1.37	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	3.8	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 5 mm/min)	92.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	5200	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	11	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	6.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	61	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	33	kJ/m²	ISO 179
Hardness			
Ball Pressure Test, (200 °C)	Pass		IEC 60695-10-2
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	197	°C	ISO 306
(A (10N), 50 °C/h)	219	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	217	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	190	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	375	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093

Flammable			
Burning Rate			
(2.00 mm)	35	mm/min	FMVSS 302
(2.00 mm)	35	mm/min	ISO 3795
Glow Wire Flammability Index			
(1.5 mm)	725	°C	IEC 60695-2-12
(3.0 mm)	725	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	750	°C	IEC 60695-2-13
(3.0 mm)	750	°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			
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	100	°C
Suggested Max Moisture	0.05	%
Processing (Melt) Temp	240 to 250	°C
Mold Temperature	70 to 90	°C