

Technical Data Sheet

Schuladur A GB30 NAT

Polybutylene Terephthalate

Product Description

30% glass bead reinforced PBT compound

Processing Method Injection Molding

Filler/Reinforcement Glass Bead, 30%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (250 °C/2.16 kg)	7.5	cm ³ /10 min	ISO 1133
Density, (Method A)	1.51	g/cm ³	ISO 1183
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	3.0	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	3900	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	54.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	4100	MPa	ISO 527-1
Flexural Stress, (2.0 mm/min)	97.0	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	4.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	3.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	60	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	35	kJ/m ²	ISO 179
Hardness			
Ball Pressure Test, (200 °C)	Pass		IEC 60695-10-2
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	189	°C	ISO 306
(A (10N), 50 °C/h)	219	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	172	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	80.0	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	200	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093

Flammable			
Burning Rate			
(2.00 mm)	34	mm/min	ISO 3795
(2.00 mm)	34	mm/min	FMVSS 302
Glow Wire Flammability Index			
(1.5 mm)	700	°C	IEC 60695-2-12
(3.0 mm)	700	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	725	°C	IEC 60695-2-13
(3.0 mm)	725	°C	IEC 60695-2-13
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		120	°C
Suggested Max Moisture		0.05	%
Screw Speed		<300	mm/sec
Processing (Melt) Temp		250 to 260	°C
Mold Temperature		70 to 90	°C