Technical Data Sheet

Schuladur PCR GF20 HI NAT

Polybutylene Terephthalate + PET

Product Description

20% glass fibre reinforced PBT/PET compound based on mechanical recycled sourcing, providing high impact strength. Standard color is black, color matching for dark colors possible. Automotive structural applications are possible. Automotive structural applications are possible.According to ISO 14021:2016 Schuladur PCR GF20 HI is a compound containing 10% of recycled material.Recycled content according to DIN SPEC 91446:2021-12: R10Data Quality Level according to DIN SPEC 91446:2021-12: DQL4Data Quality Level according to VDA 284: DQL Automotive

Processing Method	Injection Molding
Attribute	Impact Modified
Filler/Reinforcement	Glass Fiber, 20%
Resin ID	(PBT+PET)-I-GF20

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (260 °C/5.0 kg)	26	cm³/10 min	ISO 1133
Density, (Method A)	1.39	g/cm³	ISO 1183
Apparent (Bulk) Density	0.60 to 0.80	g/cm³	ISO 60
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	3.1	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 5 mm/min)	95.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	6200	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	10	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	56	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	54	kJ/m²	ISO 179
Thermal			
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	212	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	187	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	475	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093

Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	FMVSS 302
(2.00 mm)	<100	mm/min	ISO 3795
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	4.0 to 6.0	hr
Drying Temperature	120	°C
Suggested Max Moisture	0.02	%
Processing (Melt) Temp	260 to 280	°C
Mold Temperature	80 to 110	°C