

Technical Data Sheet

Schuladur PCR GF20 HI BLK968001

Polybutylene Terephthalate + PET

Product Description

20% glass fibre reinforced PBT/PET compound based on post consumer PET, providing high impact strength. According to ISO 14021:2016 Schuladur PCR GF20 HI BLACK is a compound containing at least 10% (R10) of recycled material that is fully based on Post-Consumer Waste (PCW). Standard color is black, color matching for dark colors possible. Automotive structural applications are possible. Data 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	cm ³ /10 min	ISO 1133
Density, (Method A)	1.38	g/cm ³	ISO 1183
Apparent (Bulk) Density	0.60 to 0.80	g/cm ³	ISO 60
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	3.5	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 5 mm/min)	90.0	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)	9.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	6.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	55	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	52	kJ/m ²	ISO 179
Thermal			
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	210	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	186	°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