Technical Data Sheet

Schuladur PCR GF 30 BLK 968001

Polybutylene Terephthalate + PET

Product Description

30% glass fibre reinforced PBT/PET compound based on mechanical recycled sourcing. Standard color is black, color matching for dark colors possible. Automotive structural applications are possible.According to ISO 14021:2016 Schuladur PCR GF30 is a compound containing 30% of recycled material.Recycled content according to DIN SPEC 91446:2021-12: R30Data Quality Level according to DIN SPEC 91446:2021-12: DQL4Data Quality Level according to VDA 284: DQL Automotive

Processing Method	Injection Molding
Filler/Reinforcement	Glass Fiber, 30%
Resin ID	(PBT+PET)-GF30

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (260 °C/2.16 kg)	17	cm³/10 min	ISO 1133
Density, (Method A)	1.55	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)	2.1	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 5 mm/min)	142	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	11000	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)	8.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	50	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	48	kJ/m²	ISO 179
Hardness			
Ball Indentation Hardness, (H 961/30)	263	MPa	ISO 2039-1
Ball Pressure Test, (200 °C)	Pass		IEC 60695-10-2
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	200	°C	ISO 306
(A (10N), 50 °C/h)	216	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	225	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	200	°C	ISO 75-2/A

Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	300	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	29	mm/min	FMVSS 302
(2.00 mm)	29	mm/min	ISO 3795
Glow Wire Flammability Index			
(1.5 mm)	700	°C	IEC 60695-2-12
(3.0 mm)	800	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	725	°C	IEC 60695-2-13
(3.0 mm)	825	°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
UL File Number	E86615		

Injection Parameters	Nominal Value	Units
Drying Time	4.0 to 6.0	hr
Drying Temperature	120	°C
Suggested Max Moisture	0.02	%
Screw Speed	<0.3	m/sec
Processing (Melt) Temp	260 to 280	°C
Mold Temperature	80 to 110	°C