Technical Data Sheet

Schuladur A3 GF 30 LM BLK 968112

Polybutylene Terephthalate + ASA

Product Description

30% glass fibre reinforced lasermarkable PBT/ASA-blend with high surface quality and reduced warpage

Processing Method	Injection Molding
Attribute	Good Surface Finish; Low Warpage
Filler/Reinforcement	Glass Fiber, 30%
Resin ID	(PBT+ASA)-GF30

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (250 °C/5.0 kg)	20	cm³/10 min	ISO 1133
Density, (Method A)	1.43	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	2.0	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	10500	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	115	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	9500	MPa	ISO 527-1
Flexural Stress, (2.0 mm/min, 2.5%)	205	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	7.0	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)	50	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	48	kJ/m²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	140	°C	ISO 306
(A (10N), 50 °C/h)	210	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	215	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	175	°C	ISO 75-2/A
Flammable			
Burning Rate			
(2.00 mm)	30	mm/min	FMVSS 302
(2.00 mm)	30	mm/min	ISO 3795

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	100	°C
Suggested Max Moisture	0.05	%
Nozzle Temperature	260	°C
Processing (Melt) Temp	250 to 260	°C
Front Temperature	260	°C
Holding Pressure	40.0 to 70.0	MPa
Hopper Temperature	70	°C
Middle Temperature	245	°C
Vent Depth	0.02	mm
Rear Temperature	230	°C
Injection Rate	Moderate-Fast	
Back Pressure	5.00 to 10.0	MPa
Mold Temperature	60 to 90	°C
Injection Pressure	80.0 to 120	MPa
Cushion	2.00 to 5.00	mm