Technical Data Sheet

Schulaketon GF30 BLK968001

Polyketone, Aliphatic

Product Description

30% glass fiber reinforced aliphatic Polyketon

Processing Method	Injection Molding
Filler/Reinforcement	Glass Fiber, 30%
Resin ID	PK

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (240 °C/2.16 kg)	6.0	cm³/10 min	ISO 1133
Density, (Method A)	1.47	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	3.5	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	6800	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	135	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	7800	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 3.5%)	170	MPa	ISO 178
(2.0 mm/min, 4.0%)	175	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	13	kJ/m²	ISO 179
(-40 °C, Type 1, Edgewise, Notch A)	10	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	70	kJ/m²	ISO 179
(-40 °C)	70	kJ/m²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	206	°C	ISO 306
(A (10N), 50 °C/h)	215	°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)	206	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI), (Solution A)	600	V	IEC 60112

Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	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			
Flame Rating			
(1.6 mm)	HB		UL 94
(3.2 mm)	HB		UL 94
Flammability Classification			
(1.6 mm)	HB		IEC 60695-11-10, -20
(3.2 mm)	HB		IEC 60695-11-10, -20

Injection Parameters	Nominal Value	Units
Drying Time	3.0 to 4.0	hr
Drying Temperature	80	°C
Suggested Max Moisture	0.15	%
Processing (Melt) Temp	245 to 260	°C
Mold Temperature	60 to 120	°C