Technical Data Sheet

Schulamid 6 GF20 FR2 K2346 GRY 967685

Polyamide 6

Product Description

20% glass fibre reinforced flame-retardant Polyamide 6 grade (V-0); halogen free

Processing Method	Injection Molding
Attribute	PFAS free
Filler/Reinforcement	Glass Fiber, 20%
Resin ID	PA 6 GF 20 FR(40)

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.34	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	2.7	%	ISO 527-2
Flexural Modulus	6900	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	110	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	7800	MPa	ISO 527-1
Flexural Stress	175	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	10	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	50	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	40	kJ/m²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	213	°C	ISO 306
(A (10N), 50 °C/h)	218	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	249	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	194	°C	ISO 75-2/A
Electrical			
Comparative Tracking Index (CTI)	525	V	IEC 60112
Flammable			

Glow Wire Flammability Index			
(1.5 mm)	960	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	675	°C	IEC 60695-2-13
(3.0 mm)	675	°C	IEC 60695-2-13
UL Information			
Flame Rating			
(1.6 mm)	V-0		UL 94
(3.2 mm)	V-0		UL 94
Flammability Classification			
(1.6 mm)	V-0		IEC 60695-11-10, -20
(3.2 mm)	V-0		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	0.040 to 0.10	%
Screw Speed	<250	mm/sec
Processing (Melt) Temp	240 to 260	°C
Holding Pressure	40.0 to 85.0	MPa
Injection Rate	Slow-Moderate	
Back Pressure	20 to 80	bar
Mold Temperature	60 to 100	°C
Injection Pressure	80.0 to 140	MPa