Technical Data Sheet

Schulamid 66 GBF3020 K1750 NAT

Polyamide 66

Product Description

30% glass fibre and glass bead reinforced PA 66, high strength, low warpage

Processing Method	Injection Molding
Attribute	High Strength; Low Warpage
Filler/Reinforcement	Glass Bead\Glass Fiber, 30%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.35	g/cm³	ISO 1183
Viscosity Number	145	cm³/g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.5	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	4.5	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	160	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	120	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	8000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	5500	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)	6.0	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	13	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A) - Conditioned	10	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	50	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	35	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	50	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise) - Conditioned	45	kJ/m²	ISO 179
Notched Izod Impact Strength			
(23 °C, Type 1, Notch A)	4.0	kJ/m²	ISO 180
(-40 °C, Type 1, Notch A)	7.0	kJ/m²	ISO 180

Unnotched Izod Impact Strength			
(23 °C, Type 1)	45	kJ/m²	ISO 180
(-40 °C, Type 1)	40	kJ/m²	ISO 180
Hardness			
Ball Indentation Hardness, (H 358/30)	220	MPa	ISO 2039-1
Ball Pressure Test, (140 °C)	Pass		IEC 60695-10-2
Thermal			
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	245	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	245	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
- Conditioned	10000000000	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	450	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	1000000000000	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	600	°C	IEC 60695-2-12

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	%
Processing (Melt) Temp	280 to 300	°C
Mold Temperature	60 to 120	°C