

Technical Data Sheet

Schulamid 6 GBF3020 K1697 NAT

Polyamide 6

Product Description

30% glass fibre and glass bead reinforced PA 6

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)	1.34	g/cm ³	ISO 1183
Viscosity Number	147	cm ³ /g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	4.3	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	10	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	6200	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	148	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	90.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	7500	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	4250	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 3.5%)	185	MPa	ISO 178
(2.0 mm/min, 5.5%)	205	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	9.5	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.2	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	20	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	70	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	55	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	97	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature, (B (50N), 50 °C/h)	214	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	218 °C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	193 °C	ISO 75-2/A
Flammable		
Burning Rate		
(2.00 mm)	<100 mm/min	FMVSS 302
(2.00 mm)	<100 mm/min	ISO 3795

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	250 to 280	°C
Mold Temperature	60 to 100	°C