Technical Data Sheet

Schulamid 6 GF50 HI K1666 BLK968017

Polyamide 6

Product Description

50% glass fiber reinforced PA 6, high strength and stiffness, impact modified

Processing Method	Injection Molding
Attribute	High Stiffness; High Strength; Impact Modified
Additive	Impact Modifier
Filler/Reinforcement	Glass Fiber, 50%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.54	g/cm³	ISO 1183
Viscosity Number	140	cm³/g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	2.6	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	5.0	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	175	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	115	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	15000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	9000	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	18	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	14	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	27	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	80	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	65	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	215	°C	ISO 306
(A (10N), 120 °C/h)	222	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	225	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	210	°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
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

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