Technical Data Sheet

Schulamid XM GF50 BLK968001

Polyamide 66 + PA 6I/6T

Product Description

50% glassfiber reinforced semi-aromatic Polyamide Compound with excellent rigity and strength, also if conditioned. Able for Substitution Die Cast Metal.

Processing Method	Injection Molding
Filler/Reinforcement	Glass Fiber, 50%
Resin ID	PA 66 + PA 6I/6T

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.59	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break			
(5 mm/min)	3.0	%	ISO 527-2
(5 mm/min) - Conditioned	3.0	%	ISO 527-2
Flexural Modulus	15500	MPa	ISO 178
Tensile Stress at Break			
(5 mm/min)	250	MPa	ISO 527-2
(5 mm/min) - Conditioned	220	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min)	17500	MPa	ISO 527-1
(1 mm/min) - Conditioned	16500	MPa	ISO 527-1
Flexural Stress, (2.0 mm/min)	360	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C)	17	kJ/m²	ISO 179-1/1eA
(-30 °C, Type 1, Edgewise, Notch A)	15	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	17	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	100	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	90	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	100	kJ/m²	ISO 179
Hardness			
Ball Indentation Hardness, (H 931/30)	290	MPa	ISO 2039-1
Thermal			

Deflection Temperature Under Load			
(0.45 MPa, Unannealed)	245	°C	ISO 75-2/B
(1.80 MPa, Unannealed)	230	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
- Conditioned	>1.0E+10	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI), (Solution A)	600	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	>1.0E+12	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302
Additional Information			
Water Absorption 23C/50RH	3.5 to 4.0	%	ISO 62
UL Information			
Flammability Classification			
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20

Injection Parameters	Nominal Value	Units
Drying Time	3.0 to 6.0	hr
Drying Temperature	80	°C
Suggested Max Moisture	0.040 to 0.10	%
Processing (Melt) Temp	280 to 300	°C
Mold Temperature	80 to 120	°C