Technical Data Sheet

Schulamid 612 GF30 H BLK968001

Polyamide 612

Product Description

30% glass fiber reinforced, Polyamide 612 compound, heat stabilized

Processing Method	Injection Molding
Filler/Reinforcement	Glass Fiber, 30%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (245 °C/5.0 kg)	20	cm³/10 min	ISO 1133
Density, (Method A)	1.30	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.3	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	6.0	%	ISO 527-2
Flexural Modulus, (23 °C, 2.0 mm/min)	7500	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	140	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	100	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	9000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	6600	MPa	ISO 527-1
Flexural Stress, (23 °C, 2.0 mm/min, 4.0%)	220	MPa	ISO 178
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	10	kJ/m²	ISO 179
(-40 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	60	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	50	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	65	kJ/m²	ISO 179
(-40 °C, Type 1, Edgewise)	50	kJ/m²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	204	°C	ISO 306
(A (10N), 50 °C/h)	214	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	211	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	191	°C	ISO 75-2/A
Electrical			
Volume Resistivity	2800000000 00000	ohm*cm	IEC 60093
Surface Resistivity	2300000000 0000	ohm	IEC 60093
Flammable			
Burning Rate, (2.00 mm)	<100	mm/min	ISO 3795
Glow Wire Flammability Index			
(1.5 mm)	675	°C	IEC 60695-2-12
(3.0 mm)	675	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	700	°C	IEC 60695-2-13
(3.0 mm)	700	°C	IEC 60695-2-13

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	240 to 280	°C
Mold Temperature	50 to 90	°C