Technical Data Sheet

Schulamid 612 GF65 H IS BLK

Polyamide 612

Product Description

65% glass fiber reinforced, Polyamide 612 compound, heat stabilized, improved surface finish with very high strength after conditioning

Processing Method	Gas-Assisted Injection Molding; Injection Molding; Water-Assisted Injection Molding
Attribute	Good Chemical Resistance; Good Heat Aging Resistance; Good Surface Finish
Filler/Reinforcement	Glass Fiber, 50%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.74	g/cm³	ISO 1183
Viscosity Number, (H2SO4 (Sulphuric Acid))	110	cm³/g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	2.1	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	2.6	%	ISO 527-2
Flexural Modulus, (23 °C, 2.0 mm/min)	24000	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	250	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	220	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	21500	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	20500	MPa	ISO 527-1
Flexural Stress, (23 °C, 2.0 mm/min, 2.6%)	430	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	15	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	17	kJ/m²	ISO 179
(-40 °C, Type 1, Edgewise, Notch A)	14	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
(-40 °C, Type 1, Edgewise)	No Break		ISO 179
Thermal			
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	200	°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
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	>1.0E+12	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	FMVSS 302
(2.00 mm)	<100	mm/min	ISO 3795
Glow Wire Flammability Index			
(1.5 mm)	650	°C	IEC 60695-2-12
(3.0 mm)	650	°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
Additional Information			
Water Absorption 23C/50RH	0.8	%	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 4.0	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