Technical Data Sheet

Schulamid 612 GF33 HE NAT

Polyamide 612

Product Description

33% glass fiber reinforced, Polyamide 612 Compound, electrically neutral heat stabilized

Processing Method	Injection Molding
Attribute	Good Chemical Resistance; Good Heat Aging Resistance; Halogen Free
Filler/Reinforcement	Glass Fiber, 33%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density	1.33	g/cm³	ISO 1183
Viscosity Number, (H2SO4 (Sulphuric Acid))	125	cm³/g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.2	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	4.5	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	10000	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	175	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	140	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	10500	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	8700	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 3.5%)	280	MPa	ISO 178
(2.0 mm/min, 3.7%)	280	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	11	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	13	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	85	kJ/m²	ISO 179
Thermal			

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	215	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	195	°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 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