

Technical Data Sheet

Schulamid 612 GF 50 H GRY 967950



Polyamide 612

Product Description

50% glass fiber reinforced Polyamid 612 compound, heat stabilised

Processing Method	Injection Molding
Attribute	Heat Stabilized
Additive	Heat Stabilizer
Filler/Reinforcement	Glass Fiber, 50%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.54	g/cm ³	ISO 1183
Mechanical			
Flexural Strain at Flexural Strength, (23 °C)	2.5	%	ISO 178
Tensile Strain at Break			
(Type 1A, 5 mm/min)	2.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	2.5	%	ISO 527-2
Flexural Modulus, (23 °C, 2.0 mm/min)	15000	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	200	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	145	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	16500	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	12000	MPa	ISO 527-1
Flexural Stress, (23 °C, 2.0 mm/min)	300	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	13	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	11	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	16	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	70	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	64	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	72	kJ/m ²	ISO 179
Thermal			

Vicat Softening Temperature		
(B (50N), 50 °C/h)	208 °C	ISO 306
(A (10N), 50 °C/h)	216 °C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	218 °C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	205 °C	ISO 75-2/A
Electrical		
Comparative Tracking Index (CTI), (Solution A)	600 V	IEC 60112
Flammable		
Burning Rate, (2.00 mm)	50 mm/min	ISO 3795
Glow Wire Flammability Index		
(1.5 mm)	725 °C	IEC 60695-2-12
(3.0 mm)	800 °C	IEC 60695-2-12
Glow Wire Ignition Temperature		
(1.5 mm)	750 °C	IEC 60695-2-13
(3.0 mm)	825 °C	IEC 60695-2-13
Additional Information		
Water Absorption 23C/50RH	1.2 %	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	4.0 to 8.0	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