

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	