

Technical Data Sheet

Schulamid 612 GF 33 015RD BLK968001



Polyamide 612

Product Description

33% glass fiber reinforced, Polyamide 612 compound

Processing Method Injection Molding

Filler/Reinforcement Glass Fiber, 33%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.34	g/cm ³	ISO 1183
Mechanical			
Flexural Strain at Flexural Strength, (23 °C)	3.4		ISO 178
Tensile Strain at Break			
(Type 1A, 5 mm/min)	2.6	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	4.3	%	ISO 527-2
Flexural Modulus, (23 °C, 2.0 mm/min)	8700	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	165	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	122	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	10000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	8050	MPa	ISO 527-1
Flexural Stress, (23 °C, 2.0 mm/min)	235	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	9.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	10	kJ/m ²	ISO 179
(-40 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	60	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	55	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	70	kJ/m ²	ISO 179
(-40 °C, Type 1, Edgewise)	50	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	209	°C	ISO 306
(A (10N), 50 °C/h)	214	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	216	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	199	°C	ISO 75-2/A
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)	700	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	700	°C	IEC 60695-2-13
(3.0 mm)	725	°C	IEC 60695-2-13
Additional Information			
Water Absorption 23C/50RH	1.3	%	ISO 62
UL Information			
Flame Rating			
(1.6 mm)	HB		UL 94
(3.2 mm)	HB		UL 94
Flammability Classification			
(1.6 mm)	HB		IEC 60695-11-10, -20
(3.2 mm)	HB		IEC 60695-11-10, -20
Injection Parameters			
	Nominal Value	Units	
Processing (Melt) Temp	240 to 280	°C	
Mold Temperature	80 to 110	°C	