Technical Data Sheet

Schulamid 612X GB7 HI U SIL967914

Polyamide 612

Product Description

7% glass bead reinforced Polyamide 612, impact modified, UV stabilized, specialized for mold-in-color exterior applications

Processing Method	Injection Molding
Filler/Reinforcement	Glass Bead, 7.0%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (275 °C/2.16 kg)	35	cm³/10 min	ISO 1133
Density, (Method A)	1.13	g/cm³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	60.0	MPa	ISO 527-2
Nominal Tensile Strain at Break, (50 mm/min, Type 1A)	8.5	%	ISO 527-2
Flexural Modulus, (23 °C, 2.0 mm/min)	2800	MPa	ISO 178
Tensile Strain at Yield, (Type 1A, 50 mm/min)	4.5	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 50 mm/min)	55.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2800	MPa	ISO 527-1
Flexural Stress			
(23 °C, 2.0 mm/min, 3.5%)	75.0	MPa	ISO 178
(23 °C, 2.0 mm/min, 6.0%)	85.0	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	5.5	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	4.5	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	No Break		ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	165	°C	ISO 306
(A (10N), 50 °C/h)	215	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	160	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	60.0	°C	ISO 75-2/A
Flammable			

Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302
Glow Wire Flammability Index			
(1.5 mm)	675	°C	IEC 60695-2-12
(3.0 mm)	675	°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
UL Information			
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
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	60 to 90	°C