

Technical Data Sheet

Schulamid 612 NV FC EXP NATURAL



Polyamide 612

Product Description

Polyamide 612, low viscosity grade thinn for injection molding parts. Material with flame rating V-2. FDA approved for food contact.

Processing Method Injection Molding

Resin ID PA612

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (230 °C/21.6 kg)	80	cm ³ /10 min	ISO 1133
Density, (Method A)	1.05	g/cm ³	ISO 1183
Viscosity Number	105	cm ³ /g	ISO 307
Mechanical			
Tensile Stress at Yield	65	MPa	ISO 527-2
- Conditioned	53	MPa	ISO 527-2
Nominal Tensile Strain at Break			
(50 mm/min, Type 1A) - Conditioned	120	%	ISO 527-2
(50 mm/min, Type 1A)	32	%	ISO 527-2
Tensile Strain at Yield			
(Type 1A, 50 mm/min)	11	%	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	16	%	ISO 527-2
Tensile Stress at Break	40	MPa	ISO 527-2
- Conditioned	37	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	2700	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	1400	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	3.5	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	3.5	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	4.5	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	No Break		ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Thermal			

Vicat Softening Temperature			
(B (50N), 50 °C/h)	184	°C	ISO 306
(A (10N), 50 °C/h)	208	°C	ISO 306
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	57.0	°C	ISO 75-2/A

Flammable

Burning Rate			
(2.00 mm)	<100	mm/min	FMVSS 302
(2.00 mm)	<100	mm/min	ISO 3795

Additional Information

Water Absorption, - Conditioned	1.2	%	
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UL Information

Flame Rating, (8.0 mm)	V-2		UL 94
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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	230 to 270	°C
Mold Temperature	50 to 90	°C