Technical Data Sheet

SCHULAMID® 612 NV FC EXP

Polyamide 612
Engineering Plastics

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

General	
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA612

Physical	Dry	Conditioned	Unit	Test Method
Density	1.05	--	g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/21.6 kg)	80	--	cm³/10min	ISO 1133
Viscosity Number	105	--	cm³/g	ISO 307
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	392000 (2700)	203000 (1400)	psi (MPa)	ISO 527-2/1A/1
Tensile Stress				ISO 527-2
Yield	9430 (65.0)	7690 (53.0)	psi (MPa)	
Break	5800 (40.0)	5370 (37.0)	psi (MPa)	
Tensile Strain (Yield)	11	16	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	32	120	%	ISO 527-2/1A/50
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	1.7 (3.5)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	1.7 (3.5)	2.1 (4.5)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	No Break	--		
73°F (23°C)	No Break	No Break		
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				ISO 75-2/Af
264 psi (1.8 MPa), Unannealed	135 (57.0)	--	°F (°C)	
Vicat Softening Temperature				
--	406 (208)	--	°F (°C)	ISO 306/A50
--	363 (184)	--	°F (°C)	ISO 306/B50

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Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 in (2.00 mm)	< 3.9 (< 100)	--	in/min (mm/min)	ISO 3795
0.0787 in (2.00 mm)	< 3.9 (< 100)	--	in/min (mm/min)	FMVSS 302
Flame Rating (0.31 in (8.0 mm))	V-2	--		UL 94

Cured Properties	Dry	Conditioned	Unit
Water Absorption	--	1.2	%

Additional Information

1.) Not for use in food contact applications
2.) Not for use in medical or pharmaceutical applications

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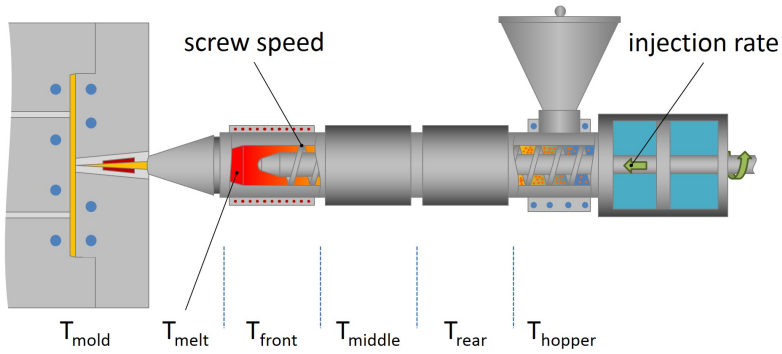

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Suggested Max Regrind	20 %	20 %
Processing (Melt) Temp	446 to 518 °F	230 to 270 °C
Mold Temperature	122 to 194 °F	50 to 90 °C

Notes

These are typical property values not to be construed as specification limits.