Technical Data Sheet

Schulamid 612 FS 4003

Polyamide 612
LyondellBasell Industries
Engineering Plastics

Product Description
Unfilled heat stabilized PA 612 compound especially for extrusion applications. Impact modified. Glossy surface. Easy processing with good flow properties. UV stabilized.

General		
Features	• Good Flow • Heat Stabilized	• High Gloss • UV Stabilized
Automotive Specifications	• GM GMW15702-435190 PA6/12	
Processing Method	• Extrusion	• Injection Molding
Resin ID (ISO 1043)	• PA612	

Physical	Dry	Conditioned	Unit	Test Method
Density	1.04	--	g/cm³	ISO 1183/A
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	254000 (1750)	109000 (750)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress (Yield)	6670 (46.0)	4930 (34.0)	psi (MPa)	ISO 527-2/1A/50
Tensile Strain (Yield)	5.0	25	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	> 100	> 300	%	ISO 527-2/1A/50
Flexural Modulus [1]	181000 (1250)	--	psi (MPa)	ISO 178
Flexural Stress [1]	7540 (52.0)	--	psi (MPa)	ISO 178
Flexural Strain at Flexural Strength	1160 (8.00)	--	psi (MPa)	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°f (-30°c)	14 (30)	--	ft·lb/in² (kJ/m²)	
73°f (23°c)	47 ft·lb/in² (98 kJ/m²)	No Break	(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**
Deflection Temperature Under Load				
66 Psi (0.45 Mpa), Unannealed	293 (145)	--	°F (°C)	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	140 (60.0)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	284 (140)	--	°F (°C)	ISO 306/B50
--	392 (200)	--	°F (°C)	ISO 306/A50

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Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	> 1.0E+15	> 1.0E+12	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	> 1.0E+10	ohms·m	IEC 62631-3-1
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Burning Rate				
0.0787 In (2.00 Mm)	0.79 (20)	--	in/min (mm/min)	ISO 3795
0.0787 In (2.00 Mm)	0.79 (20)	--	in/min (mm/min)	FMVSS 302
Flammability Classification				IEC 60695-11-10, -20
0.06 In (1.5 Mm)	HB	--		
0.12 In (3.0 Mm)	HB	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.06 In (1.5 Mm)	1340 (725)	--	°F (°C)	
0.12 In (3.0 Mm)	1340 (725)	--	°F (°C)	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.06 In (1.5 Mm)	1380 (750)	--	°F (°C)	
0.12 In (3.0 Mm)	1380 (750)	--	°F (°C)	

Additional Information

ISO 1874-PA 612-EAGHLW-18-020-N
DIN73378-PA 612-HIHL

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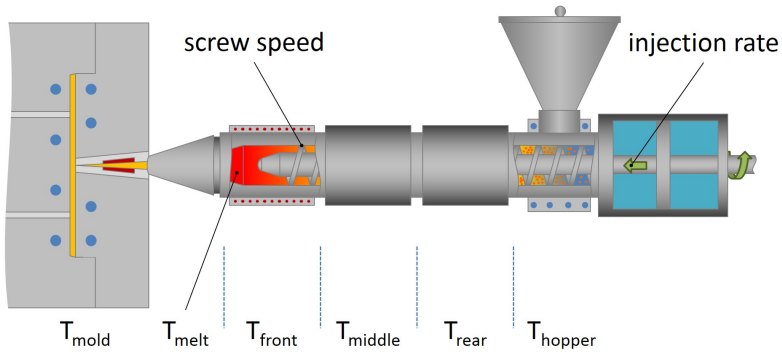

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Processing (Melt) Temp	446 to 518 °F	230 to 270 °C
Mold Temperature	140 to 194 °F	60 to 90 °C

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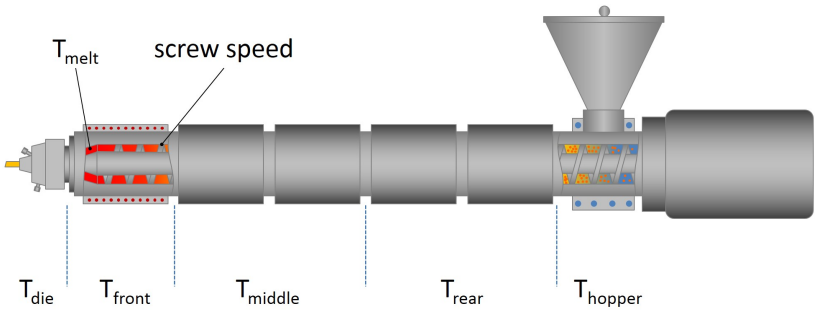

Extrusion	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.10 %	0.10 %
Melt Temperature	446 to 518 °F	230 to 270 °C

Notes

[1] 0.079 in/min (2.0 mm/min)

Notes

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