

Technical Data Sheet

# Schulamid 612 FS 5104

Polyamide 612  
LyondellBasell Industries  
Engineering Plastics

**Product Description**

Impact modified Polyamide 612 with electrical neutral heat stabilization system for extrusion applications. Heat stabilization system with very low halogen content (<30 ppm).

**General**

Features	<ul style="list-style-type: none"> <li>• Chemical Resistant</li> <li>• Corrosion Resistant</li> <li>• Fuel Resistant</li> <li>• Good Dimensional Stability</li> </ul>	<ul style="list-style-type: none"> <li>• Heat Aging Resistant</li> <li>• High Impact Resistance</li> <li>• Low Temperature Toughness</li> <li>• Low to No Water Absorption</li> </ul>	<ul style="list-style-type: none"> <li>• Medium-high Viscosity</li> <li>• Oil Resistant</li> </ul>
Processing Method	<ul style="list-style-type: none"> <li>• Extrusion</li> </ul>		

Physical	Dry	Conditioned	Unit	Test Method
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Density	1.01	--	g/cm <sup>3</sup>	ISO 1183/A
Melt Volume-Flow Rate (MVR) (275°C/10.0 Kg)	12	--	cm <sup>3</sup> /10min	ISO 1133

Mechanical	Dry	Conditioned	Unit	Test Method
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Tensile Modulus	160000 (1100)	66700 (460)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress (Break)	5370 (37.0)	5510 (38.0)	psi (MPa)	ISO 527-2/1A/50
Nominal Tensile Strain at Break	> 200	> 270	%	ISO 527-2/1A/50
Flexural Modulus	142000 (980)	--	psi (MPa)	ISO 178

Impact	Dry	Conditioned	Unit	Test Method
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Charpy Notched Impact Strength				ISO 179/1eA
-40°F (-40°C)	29 (61)	--	ft-lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
73°F (23°C)	47 (98)	50 (110)	ft-lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F (-40°C)	No Break	--		
73°F (23°C)	No Break	No Break		

Hardness	Dry	Conditioned	Unit	Test Method
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Ball Indentation Hardness (H 132/30)	8560 (59.0)	--	psi (MPa)	ISO 2039-1
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Thermal	Dry	Conditioned	Unit	Test Method
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Deflection Temperature Under Load				
66 Psi (0.45 Mpa), Unannealed	158 (70.0)	--	°F (°C)	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	102 (39.0)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	189 (87.0)	--	°F (°C)	ISO 306/B50
--	392 (200)	--	°F (°C)	ISO 306/A50

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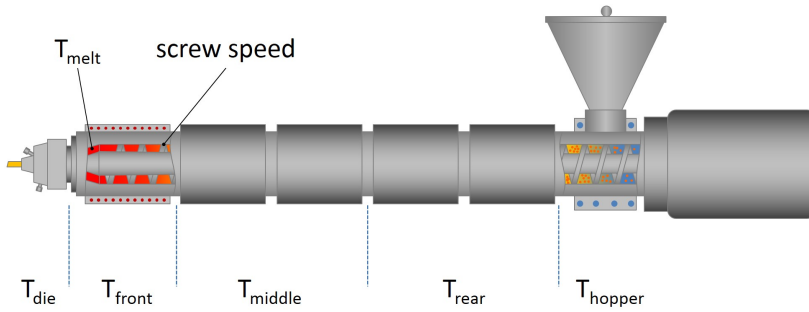
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Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 In (2.00 Mm)	< 3.9 (< 100)	--	in/min (mm/min)	ISO 3795
0.0787 In (2.00 Mm)	< 3.9 (< 100)	--	in/min (mm/min)	FMVSS 302
Flammability Classification				
0.06 In (1.5 Mm)	HB	--		IEC 60695-11-10, -20
0.12 In (3.0 Mm)	HB	--		
Glow Wire Flammability Index				
0.06 In (1.5 Mm)	1250 (675)	--	°F (°C)	IEC 60695-2-12
0.12 In (3.0 Mm)	1250 (675)	--	°F (°C)	
Glow Wire Ignition Temperature				
0.06 In (1.5 Mm)	1200 (650)	--	°F (°C)	IEC 60695-2-13
0.12 In (3.0 Mm)	1200 (650)	--	°F (°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**

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