Technical Data Sheet

Schulamid 612 FS 4104

Polyamide 612
LyondellBasell Industries
Engineering Plastics

Product Description

High 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	• Chemical Resistant • Corrosion Resistant • Fuel Resistant • Good Dimensional Stability	• Heat Aging Resistant • High Impact Resistance • High Viscosity • Low Temperature Toughness	• Low to No Water Absorption • Oil Resistant
Automotive Specifications	• GM GMW15702-435190 PA6/12		
Processing Method	• Extrusion		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.01	--	g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (275°c/21.6 Kg)	15	--	cm³/10min	ISO 1133
Viscosity Number	120	--	cm³/g	ISO 307
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	174000 (1200)	46400 (320)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress (Break)	5080 (35.0)	4350 (30.0)	psi (MPa)	ISO 527-2/1A/50
Nominal Tensile Strain at Break	> 200	> 250	%	ISO 527-2/1A/50
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°f (-30°c)	50 (110)	--	ft·lb/in² (kJ/m²)	
73°f (23°c)	50 ft·lb/in² (110 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		
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Ball Indentation Hardness (H 358/30)	9860 (68.0)	--	psi (MPa)	ISO 2039-1
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
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	131 (55.0)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	212 (100)	--	°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
Comparative Tracking Index (Solution A)	550	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Burning Rate				
0.0787 In (2.00 Mm)	1.2 (30)	--	in/min (mm/min)	ISO 3795
0.0787 In (2.00 Mm)	1.2 (30)	--	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)	1250 (675)	--	°F (°C)	
0.12 In (3.0 Mm)	1250 (675)	--	°F (°C)	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.06 In (1.5 Mm)	1200 (650)	--	°F (°C)	
0.12 In (3.0 Mm)	1200 (650)	--	°F (°C)	

Additional Information

ISO 1874-PA 612-EAGHLW-12-010-N
DIN73378-PA 612-HIHL

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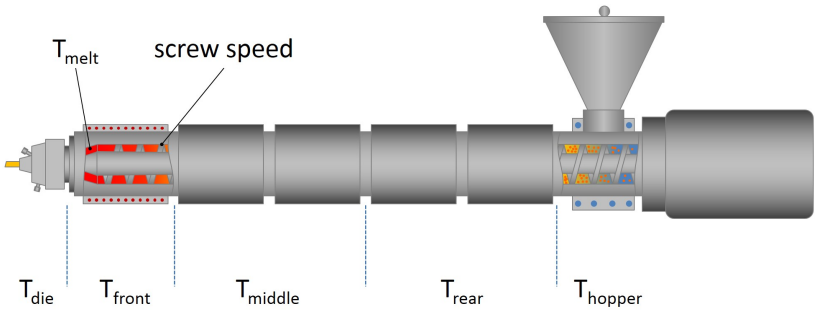

Extrusion	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.10 %	0.10 %
Melt Temperature	446 to 518 °F	230 to 270 °C

Notes

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