

SCHULAMID[®] PPA GF 33

Polyphthalamide
Engineering Plastics

Product Description

Polyphthalamid with 33% GF, high stiffness and strength at high temperatures, heatstabilized, high chemical resistance

General

Material Status	• Commercial: Active
Availability	• Europe
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Processing Method	• Injection Molding

Physical	Dry	Conditioned	Unit	Test Method
Density	1.46	--	g/cm ³	ISO 1183/A

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.99E+6 (13700)	1.74E+6 (12000)	psi (MPa)	ISO 527-2/1A/1
Tensile Stress (Break)	28300 (195)	23500 (162)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	2.0	1.6	%	ISO 527-2/1A/5

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	4.8 (10)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	4.8 (10)	4.8 (10)	ft·lb/in ² (kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	21 (45)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	33 (70)	18 (37)	ft·lb/in ² (kJ/m ²)	

Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
66 psi (0.45 MPa), Annealed, 0.130 in (3.30 mm) ¹	567 (297)	--	°F (°C)	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	536 (280)	--	°F (°C)	ISO 75-2/A
264 psi (1.8 MPa), Annealed, 0.126 in (3.20 mm)	545 (285)	--	°F (°C)	ISO 75-2/A
Vicat Softening Temperature	577 (303)	--	°F (°C)	ISO 306/B

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

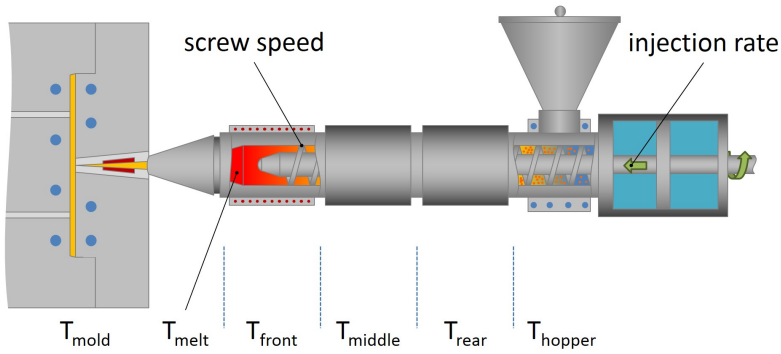
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Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 in (2.00 mm)	< 3.9 (< 100)	--	in/min (mm/min)	ISO 3795
0.0787 in (2.00 mm)	< 3.9 (< 100)	--	in/min (mm/min)	FMVSS 302
Flammability Classification				IEC 60695-11-10, -20
0.06 in (1.5 mm)	HB	--		
0.12 in (3.0 mm)	HB	--		

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Injection	Dry (English)	Dry (SI)
Drying Temperature	248 °F	120 °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	590 to 653 °F	310 to 345 °C
Mold Temperature	248 to 320 °F	120 to 160 °C

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Notes

¹ Thickness 3.2 mm

Notes

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affect the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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