

Amodel® LF-1930 HS

polyphthalamide

Amodel® LF-1930 HS is a 30% Long Glass Fiber reinforced, heat stabilized polyphthalamide PPA, with high heat deflection temperature, very high flexural modulus and low moisture absorption. It displays an excellent retention of properties in a wide temperature range as well as outstanding creep and fatigue resistance.

Amodel® LF-1930 HS has a pellet length of 9mm and can be processed on most injection-molding machines.

- Black: Amodel® LF-1930 HS BK545
- Natural: Amodel® LF-1930 HS NT

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America	
Filler / Reinforcement	• Long Glass Fiber, 30% Filler by Weight		
Features	• Creep Resistant • Electrically Insulating • Fatigue Resistant • High Impact Resistance	• High Temperature Stiffness • Low CLTE • Low Shrinkage • Low Warp	
Uses	• Aircraft Applications • Automotive Applications	• Consumer Applications • Industrial Applications	
Appearance	• Black	• Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Dry	Conditioned	Unit	Test method
Density	1.44	--	g/cm ³	ISO 1183
Mechanical	Dry	Conditioned	Unit	Test method
Tensile Modulus				ISO 527-2
23°C	11000	11000	MPa	
90°C	10000	--	MPa	
120°C	6500	--	MPa	
Tensile Stress				ISO 527-2
Break, 23°C	180	165	MPa	
Break, 90°C	160	--	MPa	
Break, 120°C	110	--	MPa	
Tensile Strain (Break)	1.8	2.0	%	ISO 527-2
Flexural Modulus (23°C)	10300	--	MPa	ISO 178
Flexural Stress (23°C)	275	--	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test method
Charpy Notched Impact Strength (23°C)	20	--	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	50	--	kJ/m ²	ISO 179

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Thermal	Dry	Conditioned Unit	Test method
Heat Deflection Temperature			
0.45 MPa, Unannealed	300	-- °C	ISO 75-2/B
1.8 MPa, Unannealed	285	-- °C	ISO 75-2/A

Injection	Dry Unit
Drying Temperature	120 °C
Drying Time	4.0 hr
Suggested Max Moisture	0.030 to 0.060 %
Suggested Max Regrind	20 %
Rear Temperature	325 to 340 °C
Middle Temperature	325 to 340 °C
Front Temperature	325 to 340 °C
Nozzle Temperature	325 to 345 °C
Processing (Melt) Temp	< 345 °C
Mold Temperature	130 to 165 °C

Injection Notes

Pre-Drying -- Since polyamides are hygroscopic materials as well as sensitive to moisture during processing, this product should always be pre-dried.

Regrind -- Regrind of highly filled thermoplastic materials, such as this material, should only be recycled with special care. The regrind content must never exceed 20% and only regrind of optimum quality should be used. In any case, part properties should be checked.

Notes

Typical properties: these are not to be construed as specifications.



Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

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