Amodel® FC-1120 L
polyphthalamide

Amodel® FC-1120 L is an FDA compliant, 20% glass fiber reinforced resin designed for high strength and stiffness. This combines with its excellent thermal properties, low water absorption and good hydrolytic stability to make it particularly suited for components used in food service and consumer applications such coffee machines and ovens.

- Natural: Amodel® FC-1120 L NT

General		
Material Status	• Limited Distribution	
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight	
Features	• Chemical Resistant • Chlorine Resistant • Creep Resistant • Good Dimensional Stability	• High Stiffness • High Strength • High Temperature Strength • Low Moisture Absorption
Uses	• Appliances • Housings • Non-specific Food Applications	• Plumbing Parts • Pump Parts
Agency Ratings	• EU 10/2011	• FDA 21 CFR 176.170(c)
RoHS Compliance	• RoHS Compliant	
Appearance	• Natural Color	
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical	Typical Value	Unit	Test method
Density	1.38	g/cm³	ISO 1183/A

Mechanical	Typical Value	Unit	Test method
Tensile Modulus	8900	MPa	ISO 527-1
Tensile Stress (Break, 23°C)	160	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.0	%	ISO 527-2
Flexural Modulus (23°C)	8400	MPa	ISO 178
Flexural Stress	230	MPa	ISO 178
Flexural Strain (23°C)	2.80		ISO 178

Impact	Typical Value	Unit	Test method
Notched Izod Impact Strength	6.3	kJ/m²	ISO 180
Unnotched Izod Impact Strength	35	kJ/m²	ISO 180

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Thermal	Typical Value	Unit	Test method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	297	°C	ISO 75-2/B
1.8 MPa, Unannealed	275	°C	ISO 75-2/A

Injection	Typical Value	Unit
Drying Temperature	120	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.030 to 0.060	%
Rear Temperature	310 to 330	°C
Middle Temperature	315 to 330	°C
Front Temperature	325 to 335	°C
Processing (Melt) Temp	320 to 345	°C
Mold Temperature	150	°C

Injection Notes

Mold Temperature:

- Higher tool temperatures might be required for thin wall sections

Storage:

- Amodel® compounds are shipped in moisture-resistant packages at moisture levels according to specifications. Sealed, undamaged bags should be preferably stored in a dry room at a maximum temperature of 50°C (122°F) and should be protected from possible damage. If only a portion of a package is used, the remaining material should be transferred into a sealable container. It is recommended that Amodel® resins be dried prior to molding following the recommendations found in this datasheet and/or in the Amodel® processing guide.

Notes

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

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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.