Amodel® FC-1160

polyphthalamide

Amodel® FC-1160 is an FDA compliant, 60% 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: FC-1160 L NT
- Black: FC-1160 L BK 946

General

Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Filler / Reinforcement	• Glass Fiber, 60% Filler by Weight	
Features	• Chemical Resistant • Chlorine Resistant • Creep Resistant • Good Dimensional Stability • Good Stiffness	• 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)	• NSF STD-51
RoHS Compliance	• RoHS Compliant	
Appearance	• Black	• Natural Color
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical	Typical Value	Unit	Test method
Density	1.80	g/cm³	ISO 1183/A

Mechanical	Typical Value	Unit	Test method
Tensile Modulus	23300	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	280	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	1.9	%	ISO 527-2
Flexural Modulus (23°C)	22800	MPa	ISO 178
Flexural Stress	438	MPa	ISO 178

Impact	Typical Value	Unit	Test method
Charpy Notched Impact Strength	13	kJ/m²	ISO 179
Charpy Unnotched Impact Strength	90	kJ/m²	ISO 179

Thermal	Typical Value	Unit	Test method
Heat Deflection Temperature			ISO 75-2/Af
1.8 MPa, Unannealed	298	°C	

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Injection	Typical Value	Unit
Drying Temperature	120	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.030 to 0.060	%
Rear Temperature	315 to 330	°C
Middle Temperature	320 to 340	°C
Front Temperature	325 to 345	°C
Processing (Melt) Temp	340 to 360	°C
Mold Temperature	160	°C

Injection Notes

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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