Amodel® FC-1150

Polyphthalamide

Solvay Specialty Polymers

Message:

Amodel® FC-1150 is an FDA-approved, 50% 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-1150 NT
Black: FC-1150 BK 946

General Information	
UL YellowCard	E95746-101652151
Filler / Reinforcement	Glass fiber reinforced material, 50% filler by weight
Features	Good dimensional stability Low hygroscopicity Rigidity, high Rigid, good High strength High temperature strength Good creep resistance Good chemical resistance Chlorine resistance
Uses	Pump parts Electrical appliances Non-specific food applications Pipe components Shell
Agency Ratings	FDA 21 CFR 176.170(c) Europe 10/1/2011 12:00:00 AM
RoHS Compliance	RoHS compliance
Appearance	Black Natural color
Forms	Particle
Processing Method	Injection molding

Physical	Nominal Value	Unit	Test Method
Density	1.67	g/cm³	ISO 1183/A
Molding Shrinkage			ASTM D955

Flow: 1.00mm [1]	0.14	%	ASTM D955
Flow: 1.00mm [2]	0.16	%	ASTM D955
Flow: 2.00mm [3]	0.18	%	ASTM D955
Flow: 2.00mm [4]	0.15	%	ASTM D955
Transverse flow: 1.00mm [5]	0.42	%	ASTM D955
Transverse flow: 1.00mm [6]	0.46	%	ASTM D955
Transverse flow: 2.00mm [7]	0.43	%	ASTM D955
Transverse flow: 2.00mm [8]	0.42	%	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	19100	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	270	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.0	%	ISO 527-2
Flexural Modulus (23°C)	18400	MPa	ISO 178
Flexural Stress	400	MPa	ISO 178
Flexural Strain (23°C)	2.40		ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	12	kJ/m^2	ISO 179
Charpy Unnotched Impact Strength	88	kJ/m^2	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (1.8 MPa, Unannealed)	300	°C	ISO 75-2/Af
Injection	**Nominal Value**	**Unit**	
Drying Temperature	120	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.030 - 0.060	%	
Rear Temperature	315 - 330	°C	
Middle Temperature	320 - 340	°C	
Front Temperature	325 - 345	°C	
Processing (Melt) Temp	340 - 360	°C	
Mold Temperature	160	°C	

Injection instructions

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.

NOTE	
1.	Pressure = 750 bar
2.	Pressure = 500 bar
3.	Pressure = 750 bar
4.	Pressure = 500 bar
5.	Pressure = 750 bar
6.	Pressure = 500 bar
7.	Pressure = 750 bar

8.	Pressure = 500 bar

Recommended distributors for this material

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