+135-3858-6433 (GuangDong)
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TEKNOR APEX

Chemlon® AF303

Teknor Apex Company (Chem Polymer) - Polyamide 66

General Information

Product Description

AF303 is a 15% glass fibre reinforced nylon 66 that offers good mechanical performance coupled with good surface finish and flow.

General

Material Status	• Commercial: Active	
Availability	• Europe	• North America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight	
Features	• Good Flow	• Good Surface Finish
Processing Method	• Injection Molding	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.24	g/cm³	ISO 1183
Molding Shrinkage [2]	1.0 to 1.6	%	Internal Method
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	754000	psi	ISO 527-2
Tensile Stress (Break)	16000	psi	ISO 527-2
Tensile Strain (Break)	5.0	%	ISO 527-2
Flexural Modulus	682000	psi	ISO 178
Flexural Stress [3]	21800	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	5.2	ft·lb/in²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (66 psi, Unannealed)	> 464	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	419	°F	ISO 75-2/A
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+14	ohms	IEC 60093
Volume Resistivity	1.0E+15	ohms·cm	IEC 60093
Electric Strength (0.118 in)	430	V/mil	IEC 60243-1
Relative Permittivity (1 MHz)	3.80		IEC 60250
Dissipation Factor (1 MHz)	0.010		IEC 60250
Comparative Tracking Index	> 600	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (Teknor Apex test result)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	2.0	hr
Rear Temperature	518 to 554	°F
Middle Temperature	518 to 554	°F
Front Temperature	518 to 554	°F
Processing (Melt) Temp	< 572	°F
Mold Temperature	176 to 194	°F
Injection Rate	Fast	
Screw Speed	50 to 200	rpm

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Injection Notes

Back pressure: Low

Injection pressure: High

No drying is necessary unless the materials has been exposed to air for longer than three hours.

Notes

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

[2] Mould shrinkage is significantly influenced by many factors including wall thickness, gating, moulding shape and processing conditions. The range values given are determined from specimen bar mouldings of 1.5 mm to 4 mm wall thickness. They are provided as a guide for comparison purposes only and no guarantee should be inferred from their inclusion. (Specimens measured in the dry state, 24 hours after moulding).

[3] Break