



Chemlon® 66GF6L

Teknor Apex Company (Chem Polymer) - Polyamide 66

General Information

Product Description

66GF6L is a 33% glass fibre reinforced nylon 66 that offers good mechanical performance, coupled with good surface finish and flow. It is a heat & light stabilised grade, suitable for extended use in outdoor, elevated service temperature applications.

General

Material Status	• Commercial: Active
Availability	• Europe
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Additive	• Heat Stabilizer • UV Stabilizer
Features	• Good Flow • Heat Stabilized • Weather Resistant • Good Surface Finish • Light Stabilized
Uses	• High Temperature Applications • Outdoor Applications
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.40	--	g/cm ³	ISO 1183
Molding Shrinkage ²	0.60 to 1.5	--	%	Internal Method
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	1.7	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.38E+6	1.06E+6	psi	ISO 527-2
Tensile Stress	26100	20300	psi	ISO 527-2
Tensile Strain (Break)	3.0	4.0	%	ISO 527-2
Flexural Modulus	1.41E+6	841000	psi	ISO 178
Flexural Stress	39200	21800	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Unnotched Impact Strength	29 ft-lb/in ²	No Break		ISO 179/1eU
Notched Izod Impact Strength	5.7	17	ft-lb/in ²	ISO 180/A
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/B
66 psi, Unannealed	> 464	--	°F	
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	464	--	°F	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+14	1.0E+11	ohms	IEC 60093
Volume Resistivity	1.0E+16	1.0E+13	ohms-cm	IEC 60093
Electric Strength (0.118 in)	410	--	V/mil	IEC 60243-1
Comparative Tracking Index	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.06 in, Teknor Apex test result	HB	--		

Processing Information

Injection	Dry Unit
Drying Temperature	176 °F
Drying Time	2.0 hr

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Injection	Dry	Unit
Rear Temperature	518 to 554	°F
Middle Temperature	518 to 554	°F
Front Temperature	518 to 554	°F
Processing (Melt) Temp	518 to 554	°F
Mold Temperature	176 to 194	°F
Injection Rate	Fast	
Back Pressure	Low	
Screw Speed	Moderate	

Injection Notes

No drying is necessary unless the material has been exposed to air for longer than three hours. The appearance of splash marks on the surface of mouldings indicates excessive moisture is present.

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 1.5mm to 4mm 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).