



Chemlon® 66GF35

Teknor Apex Company (Chem Polymer) - Polyamide 66

General Information

Product Description

66GF35 is a 35% glass fibre reinforced nylon 66 that offers increased mechanical performance for use in applications that require additional stiffness and strength.

General

Material Status	• Commercial: Active
Availability	• Europe
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.41	--	g/cm ³	ISO 1183
Molding Shrinkage ²	0.30 to 1.2	--	%	Internal Method
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	1.6	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.31E+6	943000	psi	ISO 527-2
Tensile Stress	23200	17400	psi	ISO 527-2
Tensile Strain (Break)	4.0	8.0	%	ISO 527-2
Flexural Modulus	1.16E+6	725000	psi	ISO 178
Flexural Stress	34100	18100	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Notched Izod Impact Strength	3.6	8.6	ft·lb/in ²	ISO 180/A
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/B
66 psi, Unannealed	> 473	--	°F	
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	473	--	°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
Rear Temperature	527 to 563	°F
Middle Temperature	527 to 563	°F
Front Temperature	527 to 563	°F
Processing (Melt) Temp	536 to 563	°F
Mold Temperature	176 to 194	°F

Chemlon® 66GF35

Teknor Apex Company (Chem Polymer) - Polyamide 66

Injection	Dry Unit
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).