



Chemlon® 66GS6

Teknor Apex Company (Chem Polymer) - Polyamide 66

General Information

Product Description

66GS6 is a 30% glass sphere filled nylon 66 that offers increased rigidity coupled with low distortion.

General

Material Status	• Commercial: Active
Availability	• Europe • North America
Filler / Reinforcement	• Glass Bead, 30% Filler by Weight
Features	• High Rigidity • Low Warpage
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.36	--	g/cm ³	ISO 1183
Molding Shrinkage	0.80 to 1.0	--	%	ISO 294-4
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	0.80	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	580000	290000	psi	ISO 527-2
Tensile Stress (Yield)	12300	6960	psi	ISO 527-2
Tensile Strain (Break)	5.0 to 10	20 to 50	%	ISO 527-2
Flexural Modulus	406000	160000	psi	ISO 178
Flexural Stress				ISO 178
-- ²	18900	--	psi	
-- ³	--	9140	psi	
Impact	Dry	Conditioned	Unit	Test Method
Notched Izod Impact Strength	1.4	4.3	ft-lb/in ²	ISO 180
Unnotched Izod Impact Strength	11 ft-lb/in ²	No Break		ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/B
66 psi, Unannealed	428	410	°F	
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	176	158	°F	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+14	1.0E+11	ohms	IEC 60093
Volume Resistivity	1.0E+14	1.0E+11	ohms·cm	IEC 60093
Electric Strength (0.118 in)	430	280	V/mil	IEC 60243-1
Relative Permittivity (1 MHz)	3.60	4.00		IEC 60250
Dissipation Factor (1 MHz)	0.010	0.040		IEC 60250
Comparative Tracking Index	600	500	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating	HB	HB		UL 94

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	< 572	°F
Mold Temperature	176 to 194	°F
Injection Rate	Fast	
Screw Speed	50 to 200	rpm

Injection Notes

Drying is necessary if material has been exposed to air for longer than 3 hours.

Back Pressure: Low

Injection Pressure: High

Notes

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

² At break

³ At Yield