



Chemlon® 66GS8H

Teknor Apex Company (Chem Polymer) - Polyamide 66

General Information

Product Description

66GS8H is a 40% glass-sphere filled, heat stabilised injection moulding grade of nylon 66. It has lower differential shrinkage and warpage and so is often suitable for use in applications requiring greater dimensional accuracy.

General

Material Status	• Commercial: Active
Availability	• Europe • North America
Filler / Reinforcement	• Glass Bead, 40% Filler by Weight
Features	• Good Dimensional Stability • Low Shrinkage • Heat Stabilized • Low Warpage
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.44	--	g/cm ³	ISO 1183
Molding Shrinkage ²	0.90 to 1.5	--	%	Internal Method
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	914000	464000	psi	ISO 527-2
Tensile Stress (Break)	13100	6530	psi	ISO 527-2
Flexural Modulus	725000	334000	psi	ISO 178
Flexural Stress ³	22500	10900	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	2.4	3.8	ft·lb/in ²	ISO 179
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature 66 psi, Unannealed	> 464	455	°F	ISO 75-2/B
Heat Deflection Temperature 264 psi, Unannealed	428	356	°F	ISO 75-2/A
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+14	1.0E+11	ohms	IEC 60093
Volume Resistivity	1.0E+16	1.0E+14	ohms·cm	IEC 60093
Electric Strength (0.118 in)	380	330	V/mil	IEC 60243-1
Dissipation Factor (1 MHz)	0.020	0.080		IEC 60250
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating	HB	--		Internal Method
Glow Wire Flammability Index 0.06 in	1200	--	°F	IEC 60695-2-12
Oxygen Index	27	--	%	ISO 4589-2

Processing Information

Injection	Dry	Unit
Drying Temperature	176 to 212	°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

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Injection	Dry Unit
Mold Temperature	140 to 176 °F
Injection Rate	Fast
Screw Speed	50 to 200 rpm

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, component shape and moulding conditions. The range values stated were 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).

³ Break