



Chemlon® 109-33 GH

Teknor Apex Company - Polyamide 66

General Information

Product Description

Glass filled and highly impact modified nylon 66.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Creep Resistant • Good Impact Resistance • Good Processability	• Good Stiffness • Good Toughness • Heat Stabilized	• High Strength
Appearance	• Black	• Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.36	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	0.10	%	
Flow	0.20	%	
Water Absorption (24 hr, 73°F)	0.60	%	ISO 62
Water Absorption (Saturation, 73°F)	1.9	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.35E+6	psi	ISO 527-1
Tensile Stress	23200	psi	ISO 527
Tensile Strain (Break)	3.5	%	ISO 527
Flexural Modulus	1.16E+6	psi	ISO 178/A
Flexural Stress	32600	psi	ISO 178/A
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	5.7	ft·lb/in ²	ISO 179
Charpy Unnotched Impact Strength	38	ft·lb/in ²	ISO 179
Notched Izod Impact Strength (73°F)	5.2	ft·lb/in ²	ISO 180/A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Annealed)	491	°F	ISO 75-2/B
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed	464	°F	
Melting Temperature	491	°F	
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.031 in)	HB		UL 94

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Injection	Nominal Value	Unit
Drying Temperature	150 to 180	°F
Suggested Max Moisture	0.20	%
Rear Temperature	560	°F
Middle Temperature	540	°F
Front Temperature	530	°F
Nozzle Temperature	530	°F
Mold Temperature	140 to 200	°F
Injection Pressure	5000 to 20000	psi
Screw Speed	60 to 120	rpm

Notes

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