



Chemlon® 143 GH

Teknor Apex Company - Polyamide 66

General Information

Product Description

Chemlon® 143 GH is a 43% glass fiber reinforced, heat stabilized polyamide 66 (PA 66) designed for injection molding. This high tensile strength material has a wide processing window, provides a good surface appearance, and is available globally.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Heat Stabilizer		
Features	• Good Processability • Good Surface Finish	• Good Thermal Stability • High Tensile Strength	
RoHS Compliance	• Contact Manufacturer		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.50	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.4	--	%	
Flow	0.20	--	%	
Water Absorption (24 hr, 73°F)	0.60	--	%	ISO 62
Water Absorption Saturation, 73°F	1.7	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	2.39E+6	1.59E+6	psi	ISO 527-1
Tensile Stress	31200	20000	psi	ISO 527-2
Tensile Strain (Break)	2.5	4.5	%	ISO 527-2
Flexural Modulus	1.49E+6	1.40E+6	psi	ISO 178
Flexural Stress	38000	30200	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	4.3	5.7	ft·lb/in ²	ISO 179
Charpy Unnotched Impact Strength	33	32	ft·lb/in ²	ISO 179
Notched Izod Impact Strength	3.1	5.7	ft·lb/in ²	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed	489	--	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	480	--	°F	ISO 75-2/A
Melting Temperature	490	--	°F	
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.031 in)	HB	--		UL 94

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Processing Information

Injection	Dry	Unit
Drying Temperature	176	°F
Suggested Max Moisture	0.11	%
Processing (Melt) Temp	509 to 559	°F
Mold Temperature	171 to 190	°F

Injection Notes

Maximum peak injection pressure should not exceed 80% of the machine's maximum pressure capability. Start with a holding pressure that is half the peak injection pressure. Perform a rheology curve in order to determine appropriate injection rate.

Notes

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