

Chemlon® 143 GH

Teknor Apex Company - Polyamide 66

Saturday, September 14, 2024

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 Properties¹

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, 23°C)	0.60	--	%	ISO 62
Water Absorption Saturation, 23°C	1.7	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	16500	11000	MPa	ISO 527-1
Tensile Stress	215	138	MPa	ISO 527-2
Tensile Strain (Break)	2.5	4.5	%	ISO 527-2
Flexural Modulus	10300	9620	MPa	ISO 178
Flexural Stress	262	208	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	8.9	12	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	69	67	kJ/m ²	ISO 179
Notched Izod Impact Strength	6.5	12	kJ/m ²	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	254	--	°C	ISO 75-2/B
Deflection Temperature Under Load 1.8 MPa, Unannealed	249	--	°C	ISO 75-2/A
Melting Temperature	254	--	°C	
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.8 mm)	HB	--		UL 94

Revision Date: 7/29/2024

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Legal Statement

Dry

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Processing Information

Injection	Dry Unit
Drying Temperature	80 °C
Suggested Max Moisture	0.11 %
Processing (Melt) Temp	265 to 293 °C
Mold Temperature	77 to 88 °C

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.

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