

# Chemlon® 233 GH

Teknor Apex Company - Polyamide 6

Saturday, September 14, 2024

## General Information

### Product Description

Chemlon® 233 GH is a 33% glass fiber reinforced, heat stabilized polyamide 6 (PA 6) designed for injection molding. This 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		
Automotive Specifications	• GM GMP.PA6.009 Color: Black <sup>1</sup>		• GM GMP.PA6.009 Color: Natural <sup>1</sup>
Forms	• Pellets		
Processing Method	• Injection Molding		

## ASTM & ISO Properties<sup>2</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.38	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage - Flow	0.20 to 0.40	--	%	ISO 294-4
Molding Shrinkage - Across Flow	0.40 to 0.60	--	%	ISO 294-4
Water Absorption (24 hr, 23°C)	0.90	--	%	ISO 62
Water Absorption Saturation, 23°C	2.1	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	12200	7460	MPa	ISO 527
Tensile Stress	160	100	MPa	ISO 527
Tensile Strain (Break)	3.0	6.0	%	ISO 527
Flexural Modulus	8270	6210	MPa	ISO 178
Flexural Stress	230	145	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	7.0	10	kJ/m <sup>2</sup>	ISO 179
Charpy Unnotched Impact Strength	53	67		ISO 179
Notched Izod Impact Strength 23°C	10	12	kJ/m <sup>2</sup>	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	218	--	°C	ISO 75-2/B
Deflection Temperature Under Load 1.8 MPa, Unannealed	> 200	--	°C	ISO 75-2/A
Melting Temperature	220	--	°C	
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.8 mm)	HB	--		UL 94

Revision Date: 7/30/2024

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### Legal Statement

Dry

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### Processing Information

Injection	Dry Unit
Drying Temperature	80 °C
Suggested Max Moisture	0.13 %
Processing (Melt) Temp	240 to 260 °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

<sup>1</sup> Automotive site approvals apply for US manufactured compound only

<sup>2</sup> Typical properties: these are not to be construed as specifications.

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