



Chemlon® 104-13 GH

Teknor Apex Company - Polyamide 66

General Information

Product Description

Chemlon® 104-13 GH is a 13% glass fiber reinforced, impact modified polyamide 66 (PA 66) designed for injection molding and extrusion. This tough 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	• Impact Modifier	
Features	• Good Processability • Good Surface Finish	• Good Thermal Stability • Good Toughness	• High Tensile Strength
RoHS Compliance	• Contact Manufacturer		
Automotive Specifications	• FORD ESA-M4D189-A ¹ • GM GMP.PA66.057 Color: Black ¹	• GM GMP.PA66.057 Color: Natural ¹ • STELLANTIS MS-DB-41 CPN1987 Color: BK001 Black ¹	
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ²

Physical	Dry	Conditioned	Unit	Test Method
Density	1.20	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.85 to 1.2	--	%	
Flow	0.40 to 0.60	--	%	
Water Absorption (24 hr, 73°F)	0.80	--	%	ISO 62
Water Absorption Saturation, 73°F	2.2	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	866000	530000	psi	ISO 527-1
Tensile Stress	15500	9800	psi	ISO 527-2
Tensile Strain (Break)	5.0	13	%	ISO 527-2
Flexural Modulus	551000	430000	psi	ISO 178
Flexural Stress	19400	11900	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	4.3	9.5	ft·lb/in ²	ISO 179
Charpy Unnotched Impact Strength	24	38	ft·lb/in ²	ISO 179
Notched Izod Impact Strength 73°F	4.8	8.1	ft·lb/in ²	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed	477	--	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	419	--	°F	ISO 75-2/A
Melting Temperature	495	--	°F	
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.03 in)	HB	--		UL 94

Chemlon® 104-13 GH

Teknor Apex Company - Polyamide 66

Processing Information

Injection	Dry	Unit
Drying Temperature	176	°F
Suggested Max Moisture	0.17	%
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.

Extrusion	Dry	Unit
Drying Temperature	176	°F
Suggested Max Moisture	0.17	%
Melt Temperature	509 to 559	°F
Die Temperature	509 to 559	°F
Screw L/D Ratio	25.0:1.0 to 30.0:1.0	

Extrusion Notes

For cylinder zones, use an ascending temperature profile that achieves the recommended melt temperature. The die temperature should be the same temperature as the melt or slightly higher. Suggested compression ratio is 3-4:1.

Notes

¹ Automotive site approvals apply for US manufactured compound only

² Typical properties: these are not to be construed as specifications.