

Chemlon® 113 GH

Teknor Apex Company - Polyamide 66

Saturday, September 14, 2024

General Information

Product Description

Chemlon® 113 GH is a 13% 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
Automotive Specifications	• CHRYSLER MS-DB-41 CPN2239 Color: BK001 Black ¹ • FORD ESA-M4D349-A ¹ • CHRYSLER MS-DB-41 CPN3794 Color: Non-matched Color ¹ • GM GMP.PA66.020 Color: Black ¹ • GM GMW3038P-PA66-GF15H Color: Black ¹ • CHRYSLER MS-DB-41 CPN4061 Color: 100% Color Match ¹ Natural ¹
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties²

Physical	Dry	Conditioned	Unit	Test Method
Density	1.22	--	g/cm ³	ISO 1183
Molding Shrinkage - Flow	0.40 to 0.70	--	%	ISO 294-4
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	7300	4160	MPa	ISO 527-1
Tensile Stress	119	76.5	MPa	ISO 527-2
Tensile Strain (Break)	2.2	16	%	ISO 527-2
Flexural Modulus	4650	3410	MPa	ISO 178
Flexural Stress	170	94.4	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	2.8	3.3	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	27	40	kJ/m ²	ISO 179
Notched Izod Impact Strength	> 3.0	> 3.3	kJ/m ²	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	249	--	°C	ISO 75-2/B
Deflection Temperature Under Load 1.8 MPa, Unannealed	215	--	°C	ISO 75-2/A
Melting Temperature	257	--	°C	
Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity	1.0E+15	--	ohms·cm	ASTM D257
Dielectric Strength (3.00 mm)	18	--	kV/mm	ASTM D149
Comparative Tracking Index (CTI)	600	--	V	UL 746A

Revision Date: 7/31/2020

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Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.8 mm)	HB	--		UL 94
Oxygen Index	25	--	%	ASTM D2863

Legal Statement

Dry

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Processing Information

Injection	Dry	Unit
Drying Temperature	80	°C
Suggested Max Moisture	0.17	%
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 Automotive site approvals apply for US manufactured compound only

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

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