

Chemlon® 133 GH

Polyamide 66

Teknor Apex Company

PROSPECTOR®

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Technical Data

Product Description

Chemlon® 133 GH is a 33% 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
Literature ¹	• Technical Datasheet
UL Yellow Card ²	• E90654-252584
Search for UL Yellow Card	• Teknor Apex Company • Chemlon®
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	• 3M 11-0003-5762-1 ³ • CHRYSLER MS-DB-41 • CPN1900 Color: BK001 Black ³ • CHRYSLER MS-DB-41 • CPN2224 Color: Non-matched Color ³ • FORD ESB-M4D133-A ³ • FORD ESB-M4D89-A ³ • FORD WSK-M4D663-A ³ • GM GMP.PA66.013 Color: Natural ³ • GM GMW3038P-PA66-GF35H ³
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Dry	Conditioned	Unit	Test Method
Density	1.38	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.30	--	%	
Flow	0.10	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	13600	8670	MPa	ISO 527-2
Tensile Stress	189	126	MPa	ISO 527-2
Tensile Strain (Break)	2.4	4.8	%	ISO 527-2
Flexural Modulus	9000	6840	MPa	ISO 178
Flexural Stress	275	169	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	6.6	8.6	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	53	70	kJ/m ²	ISO 179
Notched Izod Impact Strength (23°C)	7.5	9.2	kJ/m ²	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	255	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	249	--	°C	ISO 75-2/A
Melting Temperature	259	--	°C	
CLTE - Flow	5.0E-5	--	cm/cm/°C	ASTM D696
RTI Elec				UL 746B
0.8 mm	130	--	°C	
1.5 mm	130	--	°C	
3.0 mm	130	--	°C	



Thermal	Dry	Conditioned	Unit	Test Method
RTI Imp				UL 746B
0.8 mm	95.0	--	°C	
1.5 mm	110	--	°C	
3.0 mm	110	--	°C	
RTI Str				UL 746B
0.8 mm	130	--	°C	
1.5 mm	130	--	°C	
3.0 mm	130	--	°C	
Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity	1.0E+14	--	ohms·cm	ASTM D257
Dielectric Strength (3.00 mm)	16	--	kV/mm	ASTM D149
Comparative Tracking Index (CTI)	600	--	V	UL 746A
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.8 mm)	HB	--		UL 94
Oxygen Index	25	--	%	ISO 4589-2

Legal Statement

Dry

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchaser assumes all risks and liability for the results of use of the products, including use in accordance with seller's recommendations. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or others. There is no warranty of merchantability and there are no other warranties for the products described. For detailed Product Stewardship information, please contact us. Any product of Teknor Apex, including product names, shall not be used or tested in medical or food contact applications without the prior written acknowledgement of Teknor Apex as to the intended use. Please note that some products may not be available in one or more countries.

Injection	Dry Unit
Drying Temperature	80 °C
Suggested Max Moisture	0.13 %
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 These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- ² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.
- ³ Automotive site approvals apply for US manufactured compound only
- ⁴ Typical properties: these are not to be construed as specifications.



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Where to Buy

Supplier

Teknor Apex Company

Pawtucket, Pawtucket USA

Telephone: 800-556-3864

Web: <http://www.teknorapex.com/>

Distributor

3Polymer (Guangzhou) Chemical Technology Co., Ltd.

Telephone: +86-20-3466-7988

Web: <http://3polymer.com>

Availability: China

M. Holland Canada Company

Telephone: 905-665-1168

Web: <http://www.mholland.com/>

Availability: Canada

M. Holland Company

Telephone: 855-497-1403

Web: <http://www.mholland.com/>

Availability: Mexico, United States

