

Chemlon® 233 GH

Teknor Apex Company (Chem Polymer) - Polyamide 6

Wednesday, June 21, 2017

General Information

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight		
Additive	• Heat Stabilizer	• Lubricant	
Features	• Good Dimensional Stability • Good Impact Resistance • Good Processability	• Good Toughness • Heat Stabilized • High Strength	• Lubricated
Automotive Specifications	• GM GMP.PA6.009 Color: Black	• GM GMP.PA6.009 Color: Natural	
Appearance	• Black	• Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.39	g/cm ³	ASTM D792
Molding Shrinkage - Flow	0.20 to 0.40	%	ASTM D955
Water Absorption (23°C, 24 hr)	0.90	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	169	MPa	ASTM D638
Tensile Elongation (Yield)	3.0	%	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	8270	MPa	ASTM D790
Flexural Strength	241	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	140	J/m	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C, Injection Molded)	119		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	212	°C	ASTM D648
Melting Temperature	216	°C	
CLTE - Flow (-30 to 150°C)	1.9E-5	cm/cm/°C	ASTM E831
CLTE - Transverse (-30 to 150°C)	7.1E-5	cm/cm/°C	ASTM E831
RTI Elec			UL 746
0.8 mm	105	°C	
1.5 mm	105	°C	
3.0 mm	105	°C	
RTI Imp			UL 746
0.8 mm	105	°C	
1.5 mm	105	°C	
3.0 mm	105	°C	

Revision Date: 1/12/2017

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 purchasers assume 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 by others. There is no warranty of merchantability and there are no other warranties for the products described.

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Thermal	Nominal Value	Unit	Test Method
RTI Str			UL 746
0.8 mm	105	°C	
1.5 mm	105	°C	
3.0 mm	105	°C	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (3.00 mm)	11	kV/mm	ASTM D149
Comparative Tracking Index (CTI)	500	V	UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.8 mm)	HB		UL 94
Oxygen Index	22	%	ASTM D2863

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	79	°C
Suggested Max Moisture	0.20	%
Suggested Max Re grind	25	%
Rear Temperature	218 to 235	°C
Middle Temperature	252 to 263	°C
Front Temperature	252 to 268	°C
Nozzle Temperature	252 to 268	°C
Processing (Melt) Temp	249 to 266	°C
Mold Temperature	60 to 93	°C
Injection Pressure	34.5 to 138	MPa
Screw Speed	60 to 120	rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

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