



Chemlon® 253 H

Teknor Apex Company (Chem Polymer) - Polyamide 6

Thursday, September 29, 2011

General Information

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Additive	• Heat Stabilizer	• Impact Modifier	
Features	• Good Toughness	• Impact Modified	
	• Heat Stabilized	• Medium Viscosity	
Automotive Specifications	• FORD ESB-M4D178-A2	• GM GMP.PA6.005	
Appearance	• Black	• Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.11		ASTM D792
Melt Mass-Flow Rate (MFR) (235°C/1.0 kg)	5.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.015 to 0.019	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	9500	psi	ASTM D638
Tensile Elongation (Yield)	5.0	%	ASTM D638
Tensile Elongation (Break)	50	%	ASTM D638
Flexural Modulus	320000	psi	ASTM D790
Flexural Strength	12000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°F	2.5	ft-lb/in	
73°F	3.5	ft-lb/in	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed	140	°F	
Melting Temperature	420	°F	
CLTE - Flow	0.000047	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+13	ohm-cm	ASTM D257
Dielectric Strength (0.118 in)	300	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating - UL (0.0319 in)	HB		UL 94
Oxygen Index	21	%	ASTM D2863
UL	Nominal Value	Unit	Test Method
Comparative Tracking Index (CTI)	600	V	UL 746

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	175	°F
Suggested Max Moisture	0.20	%
Suggested Max Regrind	25	%

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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Injection	Nominal Value	Unit
Rear Temperature	425 to 455	°F
Middle Temperature	445 to 485	°F
Front Temperature	465 to 500	°F
Nozzle Temperature	465 to 510	°F
Processing (Melt) Temp	465 to 510	°F

Notes

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

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