



Chemlon® 253 H

Teknor Apex Company - Polyamide 6

General Information

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Additive	• Heat Stabilizer	• Impact Modifier	
Features	• Good Toughness • Heat Stabilized	• Impact Modified • Medium Viscosity	
Automotive Specifications	• FORD ESB-M4D178-A2 ¹	• GM GMP.PA6.005 Color: Black ¹	• GM GMP.PA6.005 Color: Natural ¹
Appearance	• Black	• Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ²

Physical	Nominal Value	Unit	Test Method
Density	1.11	g/cm ³	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	392000	psi	ISO 527
Tensile Stress (Break)	9430	psi	ISO 527
Tensile Strain (Break)	50	%	ISO 527
Flexural Modulus	334000	psi	ISO 178/A
Flexural Stress	12300	psi	ISO 178/A
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	6.2	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact Strength (73°F)	7.1	ft·lb/in ²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	140	°F	ISO 75-2/A
Melting Temperature	428	°F	
CLTE - Flow	4.7E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+13	ohms·cm	ASTM D257
Dielectric Strength (0.118 in)	300	V/mil	ASTM D149
Comparative Tracking Index (CTI)	600	V	UL 746A
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.03 in)	HB		UL 94
Oxygen Index	21	%	ASTM D2863

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Injection	Nominal Value	Unit
Drying Temperature	175	°F
Suggested Max Moisture	0.20	%
Suggested Max Regrind	25	%
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 Automotive site approvals apply for US manufactured compound only
- ² Typical properties: these are not to be construed as specifications.