



Chemlon® 100 H

Teknor Apex Company - Polyamide 66

General Information

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Additive	• Heat Stabilizer	• Lubricant	
Features	• General Purpose	• Good Toughness	• High Strength
	• Good Processability	• Heat Stabilized	• Lubricated
Uses	• Appliances	• Automotive Applications	• Electrical/Electronic Applications
Agency Ratings	• UL 94		
Automotive Specifications	• FORD ESF-M4D82-A ¹	• STELLANTIS MS-DB-41 CPN1899 Color: BK001 Black ¹	
Appearance	• Black	• Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ²

Physical	Nominal Value	Unit	Test Method
Density	1.14	g/cm ³	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	450000	psi	ISO 527
Tensile Stress	11900	psi	ISO 527
Flexural Modulus	421000	psi	ISO 178/A
Flexural Stress	14500	psi	ISO 178/A
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	1.8	ft-lb/in ²	
73°F	2.1	ft-lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed	183	°F	
Melting Temperature	498	°F	ISO 11357
CLTE - Flow	3.9E-5	in/in/°F	ASTM D696
RTI Elec			UL 746B
0.03 in	266	°F	
0.06 in	266	°F	
0.12 in	266	°F	
RTI Imp			UL 746B
0.03 in	203	°F	
0.06 in	221	°F	
0.12 in	230	°F	
RTI Str			UL 746B
0.03 in	230	°F	
0.06 in	230	°F	
0.12 in	230	°F	

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Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength (0.118 in)	460	V/mil	ASTM D149
Comparative Tracking Index (CTI)	600	V	UL 746A
Flammability	Nominal Value	Unit	Test Method
Burning Rate	< 3.9	in/min	ISO 3795
Flame Rating (0.03 in)	V-2		UL 94
Oxygen Index	27	%	ASTM D2863

Processing Information			
Injection	Nominal Value	Unit	
Drying Temperature	175	°F	
Suggested Max Moisture	0.20	%	
Suggested Max Regrind	25	%	
Rear Temperature	465 to 490	°F	
Middle Temperature	495 to 520	°F	
Front Temperature	505 to 540	°F	
Nozzle Temperature	505 to 535	°F	
Processing (Melt) Temp	505 to 535	°F	
Mold Temperature	70 to 200	°F	
Injection Pressure	5000 to 20000	psi	
Screw Speed	60 to 120	rpm	

Notes

- ¹ Automotive site approvals apply for US manufactured compound only
- ² Typical properties: these are not to be construed as specifications.