



Chemlon® 100

Teknor Apex Company - Polyamide 66

General Information

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Automotive Specifications	• FORD ESB-M4D150-A ¹ • FORD ESF-M4D150-A ¹
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ²

Physical	Nominal Value	Unit	Test Method
Density	1.14	g/cm ³	ISO 1183
Molding Shrinkage	1.5 to 2.2	%	ISO 2577
Water Absorption (24 hr, 73°F)	1.2	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress	12500	psi	ISO 527
Tensile Strain (Break)	> 20	%	ISO 527
Flexural Modulus	415000	psi	ISO 178/A
Flexural Stress	16000	psi	ISO 178/A
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength	> 1.7	ft-lb/in ²	ISO 180/A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	428	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	194	°F	ISO 75-2/A
Melting Temperature	495	°F	DSC
CLTE - Flow	3.9E-5	in/in/°F	ASTM D696
RTI Elec			UL 746B
0.03 in	239	°F	
0.06 in	239	°F	
0.12 in	239	°F	
RTI Imp			UL 746B
0.03 in	167	°F	
0.06 in	167	°F	
0.12 in	185	°F	
RTI Str			UL 746B
0.03 in	203	°F	
0.06 in	203	°F	
0.12 in	203	°F	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+18	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
Flame Rating (0.03 in)	V-2		UL 94
Oxygen Index	27	%	ASTM D2863

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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 525	°F
Front Temperature	505 to 540	°F
Nozzle Temperature	505 to 535	°F
Processing (Melt) Temp	505 to 535	°F

Notes

¹ Automotive site approvals apply for US manufactured compound only

² Typical properties: these are not to be construed as specifications.