



Chemlon® 100

Chem Polymer Corporation - Polyamide 66

General Information

General

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

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.14		ASTM D792
Melt Mass-Flow Rate (MFR) (275°C/0.325 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.015 to 0.022	in/in	ASTM D955
Water Absorption (24 hr)	1.2	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	12500	psi	ASTM D638
Tensile Elongation (Yield)	5.0	%	ASTM D638
Tensile Elongation (Break)	50	%	ASTM D638
Flexural Modulus	415000	psi	ASTM D790
Flexural Strength	16000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.10	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	428	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed	195	°F	ASTM D648
Melting Temperature	495	°F	DSC
CLTE - Flow	0.000039	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+18	ohm-cm	ASTM D257
Dielectric Strength (0.118 in)	460	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating - UL (0.0319 in)	V-2		UL 94
Oxygen Index	27	%	ASTM D2863
UL 746	Nominal Value	Unit	Test Method
RTI Str			UL 746
0.0319 in	203	°F	
0.0590 in	203	°F	
0.118 in	203	°F	
RTI Imp			UL 746
0.0319 in	167	°F	
0.0590 in	167	°F	
0.118 in	185	°F	
RTI Elec			UL 746
0.0319 in	239	°F	
0.0590 in	239	°F	
0.118 in	239	°F	
Comparative Tracking Index (CTI)	600	V	UL 746

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