

# Chemlon® 100 H

Teknor Apex Company (Chem Polymer) - Polyamide 66

Monday, December 4, 2017

## General Information

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

## ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / 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)	1.1	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	
CLTE - Flow	3.9E-5	in/in/°F	ASTM D696
RTI Elec			UL 746
0.03 in	266	°F	
0.06 in	266	°F	
0.12 in	266	°F	
RTI Imp			UL 746
0.03 in	203	°F	
0.06 in	221	°F	
0.12 in	230	°F	
RTI Str			UL 746
0.03 in	230	°F	
0.06 in	230	°F	
0.12 in	230	°F	

Revision Date: 12/11/2008

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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 746
Flammability	Nominal Value	Unit	Test Method
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 Re grind	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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

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