



Chemlon® 109 U

Teknor Apex Company - Polyamide 66

General Information

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Additive	• UV Stabilizer		
Uses	• Automotive Applications		
Automotive Specifications	• FORD WSS-M4D666-A2 ¹		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ²

Physical	Nominal Value	Unit	Test Method
Density	1.09	g/cm ³	ISO 1183
Molding Shrinkage	1.5 to 2.0	%	ISO 294-4
Water Absorption (24 hr, 73°F)	0.80	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield)	7250	psi	ISO 527-2
Tensile Strain (Break)	45	%	ISO 527-2
Flexural Modulus	247000	psi	ISO 178
Flexural Stress	9430	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength			ISO 180/1A
-40°F	9.5	ft-lb/in ²	
73°F	45	ft-lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed	126	°F	
Melting Temperature	502	°F	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+14	ohms-cm	ISO 1325
Dielectric Strength (0.118 in)	430	V/mil	ASTM D149
Comparative Tracking Index	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.03 in)	HB		UL 94
FMVSS Flammability	PASSES		FMVSS 302

Processing Information

Injection	Nominal Value	Unit
Suggested Max Moisture	0.20	%
Suggested Max Regrind	25	%
Rear Temperature	509 to 545	°F
Middle Temperature	509 to 554	°F
Front Temperature	509 to 563	°F
Nozzle Temperature	509 to 545	°F
Processing (Melt) Temp	518 to 563	°F