



Chemlon® 109-33 G

Teknor Apex Company - Polyamide 66

General Information

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Features	• High Impact Resistance
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.36		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	21000	psi	ASTM D638
Tensile Elongation (Yield)	3.0	%	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	1.00E+6	psi	ASTM D790
Flexural Strength	30000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°F	2.5	ft-lb/in	
73°F	3.5	ft-lb/in	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed	455	°F	
Melting Temperature	495	°F	DSC
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+18	ohms·cm	ASTM D257
Dielectric Strength (0.118 in)	280	V/mil	ASTM D149
Comparative Tracking Index (CTI)	600	V	UL 746A
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.030 in)	HB		UL 94
Oxygen Index	24	%	ASTM D2863
FMVSS Flammability	PASSES		FMVSS 302

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	175	°F
Suggested Max Moisture	0.20	%
Suggested Max Regrind	25	%
Rear Temperature	465 to 495	°F
Middle Temperature	495 to 520	°F
Front Temperature	505 to 535	°F
Nozzle Temperature	505 to 540	°F
Processing (Melt) Temp	505 to 540	°F