



Chemlon® 140 M

Teknor Apex Company - Polyamide 66

General Information

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Mineral, 40% Filler by Weight
Automotive Specifications	• FORD ESB-M4D353-A5 Color: WT031 ¹ • FORD WSK-M4D704-A1 ¹
Appearance	• White
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ²

Physical	Nominal Value	Unit	Test Method
Density	1.52	g/cm ³	ISO 1183
Molding Shrinkage	0.70 to 1.2	%	ISO 2577
Water Absorption (24 hr, 73°F)	0.80	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress	13100	psi	ISO 527
Tensile Strain (Break)	2.5	%	ISO 527
Flexural Modulus	950000	psi	ISO 178/A
Flexural Stress	19600	psi	ISO 178/A
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (73°F)	> 1.0	ft·lb/in ²	ISO 180/A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	396	°F	ISO 75-2/A
Melting Temperature	495	°F	DSC
CLTE - Flow	2.6E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength (0.118 in)	380	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.03 in)	HB		UL 94
Oxygen Index	27	%	ASTM D2863
FMVSS Flammability	PASSES		FMVSS 302

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