



Chemlon® 257 H

Teknor Apex Company (Chem Polymer) - Polyamide 6

General Information

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Uses	• Automotive Applications		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.08		ASTM D792
Molding Shrinkage - Flow	0.016 to 0.020	in/in	ASTM D955
Water Absorption (24 hr)	1.1	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	8700	psi	ASTM D638
Tensile Elongation (Yield)	5.0	%	ASTM D638
Tensile Elongation (Break)	130	%	ASTM D638
Flexural Modulus	270000	psi	ASTM D790
Flexural Strength	9000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	14	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	73		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	125	°F	ASTM D648
Melting Temperature	417	°F	
CLTE - Flow	4.7E-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)	300	V/mil	ASTM D149
Comparative Tracking Index (CTI)	600	V	UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.03 in)	HB		UL 94
Oxygen Index	21	%	ASTM D2863

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	175	°F
Suggested Max Moisture	0.20	%
Suggested Max Regrind	25	%
Rear Temperature	425 to 455	°F
Middle Temperature	445 to 485	°F
Front Temperature	465 to 500	°F
Nozzle Temperature	465 to 500	°F
Processing (Melt) Temp	465 to 500	°F