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TEKNOR APEX

Chemlon® 813CI

Teknor Apex Company - Polyamide 6/12 Copolymer

General Information

Product Description

813CI is an impact modified, 13% carbon fibre reinforced grade of PA612. It offers a combination of good mechanical strength, low density and low moisture absorption.

General		
Material Status	• Commercial: Active	
Availability	• Europe	
Filler / Reinforcement	• Carbon Fiber, 13% Filler by Weight	
Additive	• Impact Modifier	
Features	• Good Strength • Impact Modified	• Low Density • Low Moisture Absorption
Processing Method	• Injection Molding	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.11	g/cm³	ISO 1183
Molding Shrinkage [2]	0.20 to 1.0	%	Internal Method
Water Absorption (Equilibrium, 73°F, 50% RH)	1.0	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress	21800	psi	ISO 527-2
Tensile Strain (Break)	4.5	%	ISO 527-2
Flexural Modulus	979000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact Strength	4.8	ft·lb/in²	ISO 180/A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed	356	°F	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	2.0	hr
Rear Temperature	464 to 536	°F
Middle Temperature	464 to 536	°F
Front Temperature	464 to 536	°F
Processing (Melt) Temp	464 to 536	°F
Mold Temperature	176 to 194	°F
Injection Rate	Fast	
Back Pressure	Low	
Screw Speed	Moderate	

Injection Notes

No drying is necessary unless the material has been exposed to air for longer than three hours. The appearance of splash marks on the surface of mouldings indicates excessive moisture is present.