



Chemlon® 253-15GHIU

Teknor Apex Company (Chem Polymer) - Polyamide 6

General Information

Product Description

253-15GHIU is a 15% glass fibre reinforced, impact modified nylon 6 that offers good mechanical performance coupled with good surface finish. It is heat & UV stabilised so that the good mechanical performance and surface appearance is maintained when exposed to high service temperature and weathering resistance.

Colour change after 2500kJ/m² exposure (SAE J 1960) <3 Delta E

General

Material Status	• Commercial: Active		
Availability	• Europe		
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight		
Additive	• Heat Stabilizer	• Impact Modifier	• UV Stabilizer
Features	• Good Surface Finish	• Impact Modified	• Weather Resistant
	• Heat Stabilized	• Light Stabilized	
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.21	g/cm ³	ISO 1183
Molding Shrinkage ²	0.80 to 1.5	%	Internal Method
Water Absorption (Equilibrium, 73°F, 50% RH)	2.2	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress	13800	psi	ISO 527-2
Tensile Strain (Yield)	3.0	%	ISO 527-2
Tensile Strain (Break)	4.0	%	ISO 527-2
Flexural Modulus	58000	psi	ISO 178
Flexural Stress	18100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength	6.2	ft-lb/in ²	ISO 180/A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	383	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	365	°F	ISO 75-2/A
CLTE - Flow	3.1E-5	in/in/°F	Internal Method
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms-cm	IEC 60093
Electric Strength (0.118 in)	280	V/mil	IEC 60243-1
Comparative Tracking Index	500	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in, Teknor Apex test result)	HB		UL 94
Oxygen Index	22	%	ISO 4589-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	2.0	hr
Rear Temperature	464 to 518	°F
Middle Temperature	464 to 518	°F
Front Temperature	464 to 518	°F

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Injection	Nominal Value	Unit
Processing (Melt) Temp	464 to 518	°F
Mold Temperature	140 to 176	°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.

Notes

¹ Typical properties: these are not to be construed as specifications.

² Mould shrinkage is significantly influenced by many factors including wall thickness, gating, moulding shape and processing conditions. The range values given are determined from specimen bar mouldings of 1.5mm to 4mm wall thickness. They are provided as a guide for comparison purposes only and no guarantee should be inferred from their inclusion. (Specimens measured in the dry state, 24 hours after moulding).