+135-3858-6433 (GuangDong)
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TEKNOR APEX

Chemlon® 235G

Teknor Apex Company - Polyamide 6

General Information

Product Description

235G is a 35% glass fibre reinforced nylon 6 that offers a balance between mechanical performance, surface finish and mould release characteristics.

General	
Material Status	• Commercial: Active
Availability	• Europe
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Processing Method	• Injection Molding

ASTM & ISO Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.41	--	g/cm³	ISO 1183
Molding Shrinkage [2]	0.70 to 1.2	--	%	Internal Method
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	1.9	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.45E+6	1.16E+6	psi	ISO 527-1
Tensile Stress	26100	17400	psi	ISO 527-2
Tensile Strain (Break)	4.0	6.0	%	ISO 527-2
Flexural Modulus	1.33E+6	653000	psi	ISO 178
Flexural Stress	37700	20300	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength	8.1	18	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength	26	--	ft·lb/in²	ISO 179/1eU
Notched Izod Impact Strength	6.7	--	ft·lb/in²	ISO 180/A
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/B
66 psi, Unannealed	> 392	--	°F	
Deflection Temperature Under Load				ISO 75-2/A
264 psi, Unannealed	> 392	--	°F	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	1.0E+14	1.0E+11	ohms	IEC 60093
Volume Resistivity	1.0E+16	1.0E+14	ohms·cm	IEC 60093
Electric Strength (0.118 in)	280	200	V/mil	IEC 60243-1
Relative Permittivity	3.80	4.20		IEC 60250
Comparative Tracking Index	500	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating				UL 94
0.06 in, Teknor Apex test result	HB	--		
Oxygen Index	24	--	%	ISO 4589-2

Processing Information

Injection	Dry	Unit
Drying Temperature	176	°F
Drying Time	20	hr

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Injection	Dry	Unit
Rear Temperature	482 to 536	°F
Middle Temperature	482 to 536	°F
Front Temperature	482 to 536	°F
Processing (Melt) Temp	482 to 554	°F
Mold Temperature	158 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.

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).