+135-3858-6433 (GuangDong)
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TEKNOR APEX

Chemlon® ENF2

Teknor Apex Company (Chem Polymer) - Polyamide 6

General Information

Product Description

ENF2 is a 30% glass fibre reinforced, impact modified nylon 6 that offers good mechanical performance coupled with good surface finish. The grade also offers improved flow and is heat stabilised so that the good mechanical performance is maintained when exposed to elevated temperatures. The impact modification means that components in impact sensitive applications can be used without conditioning.

General		
Material Status	• Commercial: Active	
Availability	• Europe	
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight	
Additive	• Heat Stabilizer	• Impact Modifier
Features	• Good Surface Finish • Heat Stabilized	• Impact Modified • Low Temperature Toughness
Processing Method	• Injection Molding	

ASTM & ISO Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.35	--	g/cm³	ISO 1183
Molding Shrinkage [2]	0.80 to 1.4	--	%	Internal Method
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	1.7	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.17E+6	--	psi	ISO 527-2
Tensile Stress	20600	13500	psi	ISO 527-2
Tensile Strain (Break)	4.5	8.0	%	ISO 527-2
Flexural Modulus	1.04E+6	537	psi	ISO 178
Flexural Stress (3.5% Strain)	31200	12300	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength	9.0	19	ft·lb/in²	ISO 179/1eA
Notched Izod Impact Strength	7.1	--	ft·lb/in²	ISO 180/A
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				ISO 75-2/B
66 psi, Unannealed	> 392	--	°F	
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	> 374	--	°F	
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating				UL 94
0.06 in, Teknor Apex test result	HB	--		

Processing Information

Injection	Dry	Unit
Drying Temperature	176	°F
Drying Time	20	hr
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	140 to 176	°F
Injection Rate	Fast	

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Injection	Dry	Unit
Back Pressure	Moderate	
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).