



# Chemlon® A60XTH

Teknor Apex Company - Polyamide 66

## General Information

### Product Description

A60XTH is a modified nylon 66 grade that contains a heat stabilisation system to extend product life at elevated temperatures. This grade offers excellent toughness coupled with good rigidity.

### General

Material Status	• Commercial: Active
Availability	• Europe
Additive	• Heat Stabilizer • Impact Modifier
Features	• Good Toughness • Impact Modified • Heat Stabilized • Medium Rigidity
Processing Method	• Injection Molding

## ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.10	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>	1.6 to 2.3	%	Internal Method
Water Absorption (Equilibrium, 73°F, 50% RH)	2.3	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	305000	psi	ISO 527-1
Tensile Stress	8410	psi	ISO 527-2
Tensile Strain (Yield)	6.0	%	ISO 527-2
Tensile Strain (Break)	30	%	ISO 527-2
Flexural Modulus	290000	psi	ISO 178
Flexural Stress	9430	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	17	ft-lb/in <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength	No Break		ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	365	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	158	°F	ISO 75-2/A
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+14	ohms	IEC 60093
Volume Resistivity	1.0E+16	ohms·cm	IEC 60093
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	518 to 554	°F
Middle Temperature	518 to 554	°F
Front Temperature	518 to 554	°F
Processing (Melt) Temp	518 to 554	°F

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Injection	Nominal Value	Unit
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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 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).