

# Chemlon® 60GF5

Polyamide 6

Teknor Apex Company (Chem Polymer)

## Message:

60GF5 is a 25% glass fibre reinforced nylon 6 that offers good mechanical performance and is suitable for general purpose injection moulding applications.

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 25% filler by weight		
Features	General		
Uses	General		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Density	1.25	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>1</sup>	0.70 - 1.2	%	Internal method
Water Absorption (Equilibrium, 23°C, 50% RH)	2.3	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	7000	MPa	ISO 527-2
Tensile Stress	125	MPa	ISO 527-2
Tensile Strain (Break)	3.0	%	ISO 527-2
Flexural Modulus	6000	MPa	ISO 178
Flexural Stress	180	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	10	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength	45	kJ/m <sup>2</sup>	ISO 179/1eU
Notched Izod Impact	7.0	kJ/m <sup>2</sup>	ISO 180/A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, not annealed	> 200	°C	ISO 75-2/B
1.8 MPa, not annealed	180	°C	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
Dielectric Strength (3.00 mm)	10	kV/mm	IEC 60243-1
Comparative Tracking Index	500	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.50 mm, Teknor Apex test result)	HB		UL 94
Oxygen Index	24	%	ISO 4589-2
Injection	Nominal Value	Unit	

Drying Temperature	80.0	°C
Drying Time	20	hr
Rear Temperature	230 - 280	°C
Middle Temperature	230 - 280	°C
Front Temperature	230 - 280	°C
Processing (Melt) Temp	240 - 270	°C
Mold Temperature	60.0 - 80.0	°C
Injection Rate	Fast	
Back Pressure	Low	
Screw Speed	Moderate	

#### Injection instructions

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.

#### NOTE

1. 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).

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

