

Nylon 6 Reinforcement Materials

<i>Product Name</i>	<i>Product Model</i>							
PA6-GF	E15G	E30G	E45G	E50G		Data generated directly after machining (standard climate China)		
<i>Density</i>	1.23g/cm ³	1.36g/cm ³	1.50g/cm ³	1.56g/cm ³				
<i>Colour</i>	<i>Material Properties</i>		<i>Main features</i>		<i>Target Industries</i>			
Natural	<ul style="list-style-type: none"> ➤ Glass Fiber Reinforcement ➤ Hydrolysis Resistance ➤ Injection Molding Grade ➤ Thermal Stability 		<ul style="list-style-type: none"> ➤ high strength ➤ high toughness ➤ good surface ➤ good dimensional stability 		<ul style="list-style-type: none"> ➤ mechanical engineering ➤ automotive industry ➤ sports equipment 			
<i>Mechanical strength</i>	<i>parameter</i>	<i>value</i>				<i>unit</i>	<i>norm</i>	<i>comment</i>
		E15	E30	E45	E50			
Tensile strength	50mm/min	120	160	170	195	Mpa	ISO 527-2	1
Elongation at Break	50mm/min	5.0	3.5	3.0	3.0	%	ISO 527-2	1)For tensile test :specimen 1b
Flexural Strength	2mm/min	190	250	260	300	Mpa	ISO 178	2)Specimen 80mm×10mm ×4mm
Flexural Modulus	2mm/min	600	800	900	120	Mpa	ISO 178	
Izod Notched Impact Strength	23°C	8	12	13	14	kJ/m ²	ISO 180	
<i>Thermal performance</i>	<i>parameter</i>	<i>value</i>				<i>unit</i>	<i>norm</i>	<i>comment</i>
Temperature of Deflection Under	1.8MPa	190	200	205	210	°C	ISO 75	3
Temperature of Deflection Under	0.45MPa	210	210	215	218	°C	ISO 75	3)Specimen 80mm×10mm ×4mm
Melting temperature	/	220	220	220	220	°C	ISO 11375	
<i>Electrical properties</i>	<i>parameter</i>	<i>value</i>				<i>unit</i>	<i>norm</i>	<i>comment</i>
Surface resistivity	/	10 ¹⁵	10 ¹⁵	10 ¹⁵	10 ¹⁵	Ω	/	
Volume resistivity	/	10 ¹⁵	10 ¹⁵	10 ¹⁵	10 ¹⁵	Ω·cm	/	
<i>Other properties</i>	<i>parameter</i>	<i>value</i>				<i>unit</i>	<i>norm</i>	<i>comment</i>
Water absorption	24h,23°C	1.2	1.0	0.8	0.7	%	ISO 62	
Flammability	/	HB	HB	HB	HB	class	UL94	
Solid Filler Content	1h,600°C	15	30	45	50	%	ISO 3451	
<i>Suggested Temperature</i>		220-255				°C		

The information in this manual is derived from our research and practical experience. We provide this information in good faith, but it does not constitute any warranty and does not assume liability arising from third party litigation. The typical values listed are for reference only and are not intended as a promise of product quality.