

**Product Description**

50% Fiber Glass, Polyamide 6

**General Considerations**

Resin ID (ISO 1043)	· PA6 GF50	
Processing	· Injection Molding	· Extrusion
Color	· Natural	

Physical	Dry	50%RH	Unit	Method
Density / Specific Gravity	1,56	*	g/cm <sup>3</sup>	ISO 1183
Mold Shrinkage			%	ISO 294-4
Parallel	0,1 to 0,3	*		
Normal	0,5 to 0,8	*		
Water Absorption			%	ISO 62
Saturation (Water at 23°C)	4,0 to 4,5	*		
Equilibrium (23°C)	1,0 to 1,5	*		

Mechanical	Dry	50%RH	Unit	Method
Tensile Modulus	16500	10500	MPa	ISO 527-1-2
Stress at Break	220	140	MPa	ISO 527-1-2
Strain at Break	2	3	%	ISO 527-1-2
Flexural Strength	300	*	MPa	ISO 178
Flexural Modulus	12900	*	MPa	ISO 178
Charpy Impact Strength			kJ/m <sup>2</sup>	ISO 179/1eU
-30°C	95	95		
23°C	100	105		
Charpy Notched Impact Strength			kJ/m <sup>2</sup>	ISO 179/1eA
-30°C	15	15		
23°C	20	22		

Thermal	Value	Unit	Method
Melting Point	210 to 225	°C	--
Heat Deflection Temperature		°C	ISO 75-1-2
0,45 MPa	220		
1,80 MPa	210		
Coefficient of Linear Thermal Expansion		E-4/°C	ISO 11359-1/-2
Parallel ; (23 to 55 °C)	0,1		
Transverse ; (23 to 55 °C)	0,5		
Glow Wire Flammability Index		°C	IEC 60695-2-12
1,5 mm	700		
2,0 mm	700		
Glow Wire Ignition Temperature		°C	IEC 60695-2-13
2,0 mm	725		

Electrical	Dry	50%RH	Unit	Method
Relative Permittivity				IEC 60250
1E2 Hz	3,5	14		
1E6 Hz	5,2	4,5		
Dissipation factor			E-4	IEC 60250
1E2 Hz	50	3000		
1E6 Hz	150	12000		
Electric Strength	35	25	kV/mm	IEC 60243-1
Surface Resistivity	*	1E14	ohm	IEC 60093

Volume Resistivity	1E13	1E11	ohm.m	IEC 60093
<b>Process</b>			<b>Unit</b>	<b>Method</b>
Molding Process Temperature	220 to 240		°C	--
Mold Temperature	60 to 90		°C	--
Drying	80/4		°C/Hours	--

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