

**Product Texts**

40% Glass Reinforced, Heat Stabilized, for E&amp;E applications

ISO 1043 PA46-GF40

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Density of melt	1320	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	0.344	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	1930	J/(kg K)	-
<sup>[C]</sup> Eff. thermal diffusivity	1.35E-7	m <sup>2</sup> /s	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	13000 / 8000	MPa	ISO 527
<sup>[C]</sup> Stress at break	235 / 140	MPa	ISO 527
<sup>[C]</sup> Strain at break	3.3 / 6	%	ISO 527
<sup>[C]</sup> Tensile creep modulus, 1000h	* / 6000	MPa	ISO 899-1
<sup>[C]</sup> Charpy impact strength, +23°C	95 / 100	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	75 / 85	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	14 / 21	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	12 / 12	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	295 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Glass transition temperature, 10°C/min	75 / *	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	290 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	290 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	290 / *	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	25 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	50 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
<sup>[C]</sup> Oxygen index	22 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 100Hz	4.4 / 12	-	IEC 62631-2-1
<sup>[C]</sup> Relative permittivity, 1MHz	4 / 4.6	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	80 / 1500	E-4	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 1MHz	230 / 900	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	>1E13 / 1E10	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	* / 1E14	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	35 / 25	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	400 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	8.1 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	2.2 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1510 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Stanyl® TE200F8**

PA46-GF40

Envalior

Material specific properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Viscosity number	145 / *	cm <sup>3</sup> /g	ISO 307, 1157, 1628
<small>[C]: CAMPUS</small>			

**Characteristics****Processing**

Injection Molding

**Special Characteristics**

Platable, Heat stabilized or stable to heat

**Delivery form**

Pellets

**Regional Availability**

North America, Europe, Asia Pacific

**Other text information****Injection molding**[Injection Molding Recommendations](#)[Hot runner recommendations for molding high heat performance Engineering Materials](#)[Steel recommendations for molds screws and barrels](#)[Supporting document for Stanyl quality processing](#)[Trouble shooting guideline for injection molding](#)