

**Product Texts**

Unreinforced, Heat Stabilized, Wear and Friction Modified

ISO 1043 PA46

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Density of melt	913	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	0.24	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	2550	J/(kg K)	-
<sup>[C]</sup> Eff. thermal diffusivity	9.82E-7	m <sup>2</sup> /s	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	2500 / 700	MPa	ISO 527
<sup>[C]</sup> Yield stress	75 / 40	MPa	ISO 527
<sup>[C]</sup> Yield strain	18 / 30	%	ISO 527
<sup>[C]</sup> Nominal strain at break	35 / -	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	N / N	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	N / N	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	22 / 130	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	14 / 16	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> Coeff. of linear therm. expansion, parallel	90 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	110 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Humidity absorption	3.7 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1140 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics**

**Processing**  
Injection Molding, Profile Extrusion, Other Extrusion

**Special Characteristics**  
Heat stabilized or stable to heat

**Delivery form**  
Granules

**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](#)