

Product Texts

15% Glass Reinforced, Heat Stabilized

ISO 1043 PA46-GF15

Stanyl® TW200F3 is a high heat polyamide that offers excellent creep resistance, strength, stiffness and fatigue resistance especially at high temperatures, in combination with cycle-time advantages and excellent flow.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.5 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.2 / *	%	ISO 294-4, 2577
^[C] Density of melt	1100	kg/m ³	-
^[C] Thermal conductivity of melt	0.267	W/(m K)	-
^[C] Spec. heat capacity of melt	2540	J/(kg K)	-
^[C] Eff. thermal diffusivity	9.37E-8	m ² /s	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	6100 / 2800	MPa	ISO 527
^[C] Stress at break	140 / 85	MPa	ISO 527
^[C] Strain at break	3.5 / 12	%	ISO 527
^[C] Charpy impact strength, +23°C	50 / 100	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	45 / 50	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	6 / 13	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	6 / 6	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	295 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	75 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	275 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	290 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	290 / *	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	50 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	80 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	1E12 / 1E7	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 1E13	Ohm	IEC 62631-3-2
^[C] Comparative tracking index	400 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	11.5 / *	%	Sim. to ISO 62
^[C] Humidity absorption	3.15 / *	%	Sim. to ISO 62
^[C] Density	1290 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	150 / *	cm ³ /g	ISO 307, 1157, 1628
[C]: CAMPUS			

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](#)