Stanyl® TW242FM10

PA46-(GF+MF)50 Envalior

Product Texts

50% Glass/Mineral Reinforced, Heat Stabilized

ISO 1043 PA46-(GF+MF)50

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Density of melt	**1430**	kg/m³	-
[C] Thermal conductivity of melt	**0.391**	W/(m K)	-
[C] Spec. heat capacity of melt	**1680**	J/(kg K)	-
[C] Eff. thermal diffusivity	**1.64E-7**	m²/s	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**12500 / -**	MPa	ISO 527
[C] Stress at break	**160 / -**	MPa	ISO 527
[C] Strain at break	**2 / -**	%	ISO 527
[C] Charpy notched impact strength, +23°C	**5 / -**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**4 / -**	kJ/m²	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	**285 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**290 / ***	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**25 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**50 / ***	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**6.75 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**1.8 / ***	%	Sim. to ISO 62
[C] Density	**1630 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Injection Molding

Special Characteristics
Heat stabilized or stable to heat

Additives
Lubricants

Regional Availability
North America

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