


Stanyl® TW242FM10

PA46-(GF+MF)50

DSM Engineering Plastics

Product Texts

50% Glass/Mineral Reinforced, Heat Stabilized

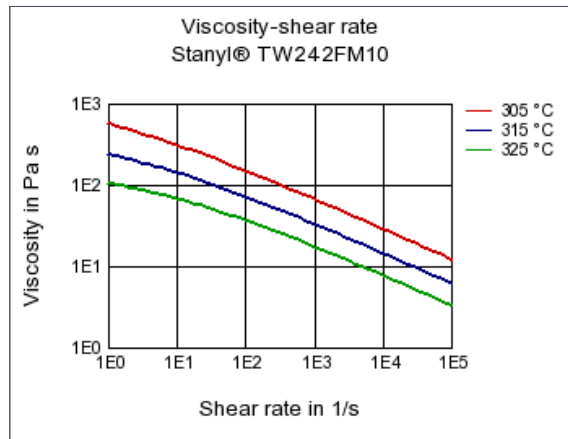
ISO 1043 PA46-(GF+MF)50

[Stanyl website](#)

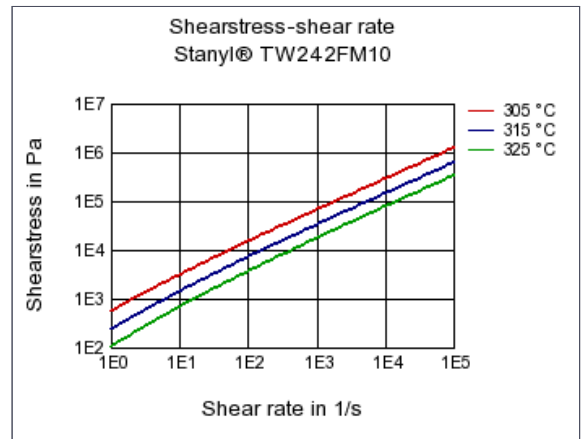
Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	14500 / -	MPa	ISO 527-1/-2
Stress at break	160 / -	MPa	ISO 527-1/-2
Strain at break	2 / -	%	ISO 527-1/-2
Charpy notched impact strength (+23°C)	6 / -	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	4.5 / -	kJ/m ²	ISO 179/1eA
Thermal properties			
ISO Data			
Melting temperature (10°C/min)	295 / *	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	75 / *	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	285 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	290 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	25 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	50 / *	E-6/K	ISO 11359-1/-2
Other properties			
ISO Data			
Water absorption	6.75 / *	%	Sim. to ISO 62
Humidity absorption	1.8 / *	%	Sim. to ISO 62
Density	1630 / -	kg/m ³	ISO 1183
Rheological calculation properties			
ISO Data			
Density of melt	1430	kg/m ³	-
Thermal conductivity of melt	0.391	W/(m K)	-
Spec. heat capacity of melt	1680	J/(kg K)	-
Eff. thermal diffusivity	1.64E-7	m ² /s	-

Diagrams

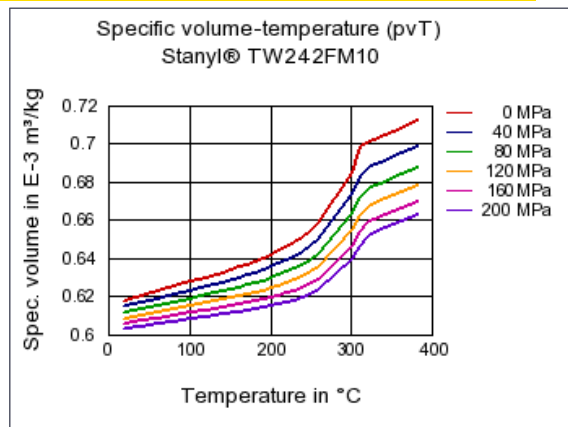
Viscosity-shear rate



Shearstress-shear rate



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Special Characteristics

Heat stabilized or stable to heat

Additives

Lubricants

Other text information

Injection Molding

[Injection Molding Recommendations](#)