


Stanyl® TW271B6

(PA46+PTFE)-CF30

DSM Engineering Plastics

Product Texts

30% Carbon Reinforced, Heat Stabilized, Wear and Friction Modified

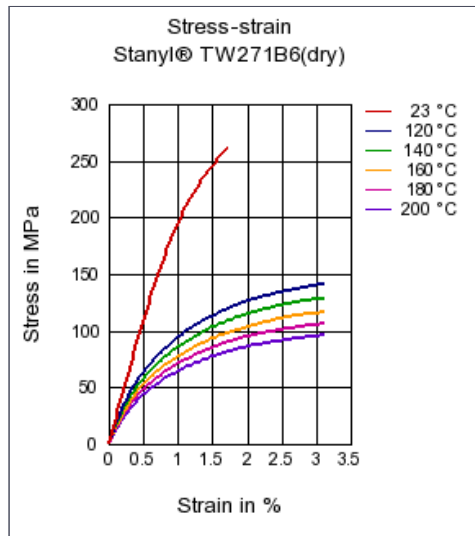
ISO 1043 (PA46+PTFE)-CF30

[Stanyl website](#)

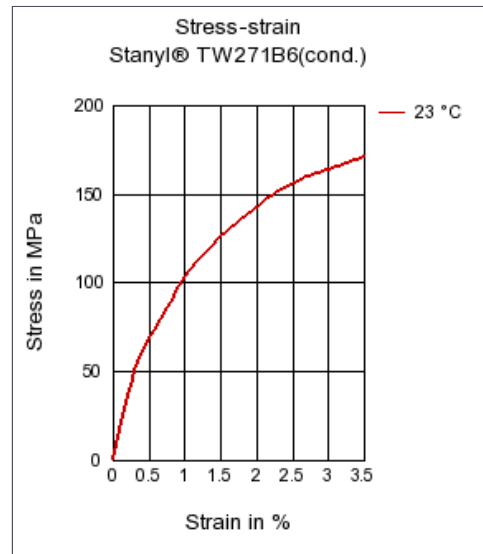
Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577
Mechanical properties			
ISO Data			
Tensile Modulus	24000 / 14500	MPa	ISO 527-1/-2
Stress at break	260 / 170	MPa	ISO 527-1/-2
Strain at break	1.7 / 3.5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	50 / 80	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	50 / 55	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	7 / 17	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	7 / 7	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)	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	35 / *	E-6/K	ISO 11359-1/-2
Other properties			
ISO Data			
Water absorption	8.7 / *	%	Sim. to ISO 62
Humidity absorption	2.4 / *	%	Sim. to ISO 62
Density	1320 / -	kg/m ³	ISO 1183
Material specific properties			
ISO Data			
Viscosity number	150 / *	cm ³ /g	ISO 307, 1157, 1628

Diagrams

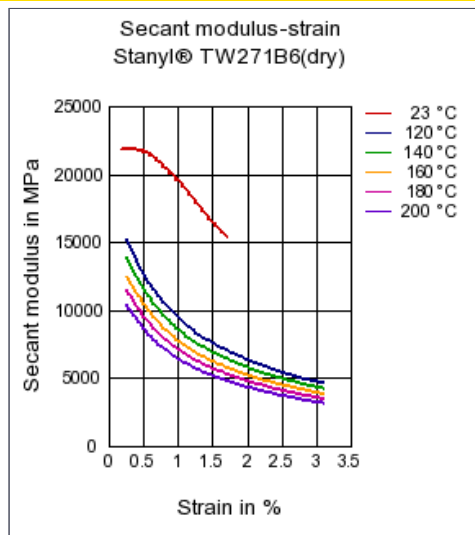
Stress-strain



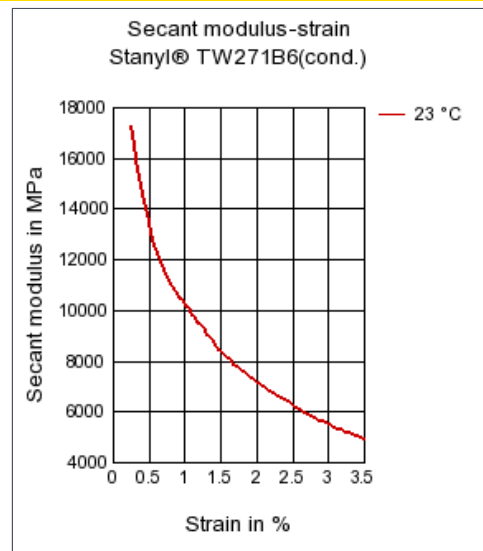
Stress-strain



Secant modulus-strain



Secant modulus-strain



Characteristics

Processing

Injection Molding

Special Characteristics

Heat stabilized or stable to heat

Other text information

Injection Molding

[Injection Molding Recommendations](#)