


Stanyl® TW371
 (PA46+PTFE)

DSM Engineering Plastics

Product Texts

Heat Stabilized, Wear and Friction Modified

ISO 1043 (PA46+PTFE)

[Stanyl website](#)

Mechanical properties	dry / cond	Unit	Test Standard
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ISO Data

Tensile Modulus	2900 / 1000	MPa	ISO 527-1/-2
Yield stress	90 / 50	MPa	ISO 527-1/-2
Yield strain	20 / 30	%	ISO 527-1/-2
Nominal strain at break	30 / >50	%	ISO 527-1/-2
Charpy impact strength (+23°C)	N / N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	150 / N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	7 / 15	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	5 / 5	kJ/m ²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
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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)	190 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	290 / *	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	290 / *	°C	ISO 306
Coeff. of linear therm. expansion, parallel	85 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	110 / *	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Burning behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	3.0 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-

Electrical properties	dry / cond	Unit	Test Standard
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ISO Data

Volume resistivity	1E12 / 1E7	Ohm*m	IEC 60093
Surface resistivity	* / 1E13	Ohm	IEC 60093
Comparative tracking index	400 / -	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
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ISO Data

Water absorption	11.4 / *	%	Sim. to ISO 62
Humidity absorption	3.2 / *	%	Sim. to ISO 62
Density	1250 / -	kg/m ³	ISO 1183

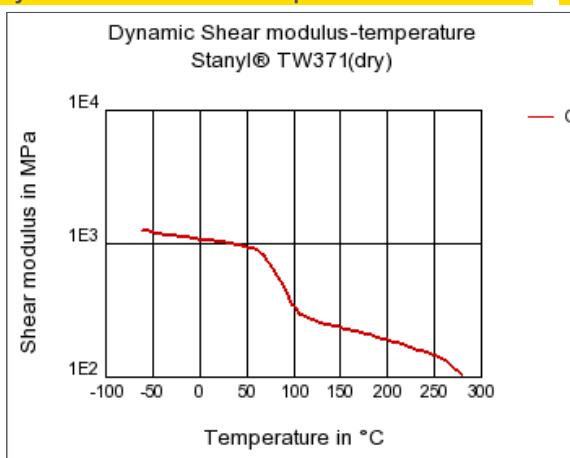
Material specific properties	dry / cond	Unit	Test Standard
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ISO Data

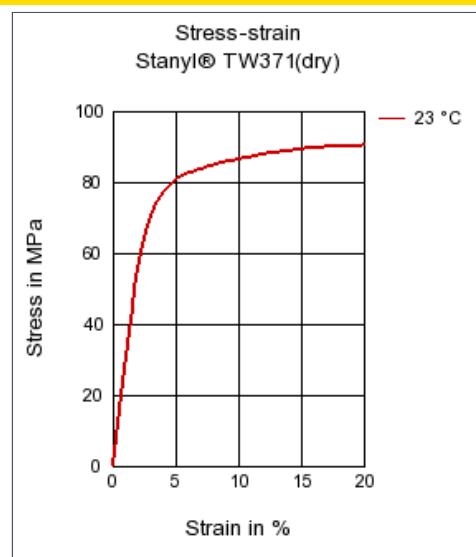
Viscosity number	180 / *	cm ³ /g	ISO 307, 1157, 1628
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Diagrams

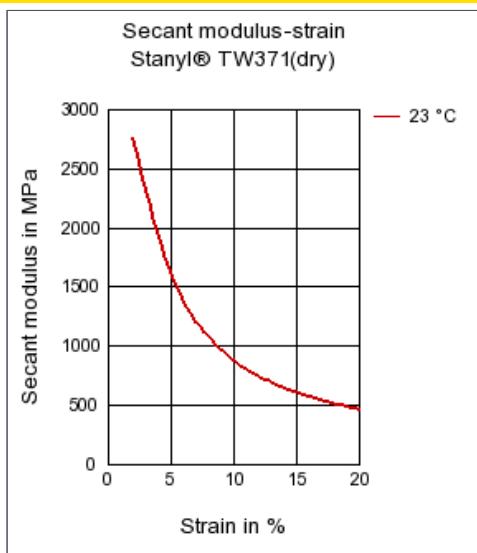
Dynamic Shear modulus-temperature



Stress-strain



Secant modulus-strain



Characteristics

Processing

Injection Molding

Additives

Lubricants

Delivery form

Pellets

Special Characteristics

Platable, Heat stabilized or stable to heat

Other text information

Injection Molding

[Injection Molding Recommendations](#)