Stanyl®

Stanyl® TW371

(PA46+PTFE)

Heat Stabilized, Wear and Friction Modified

Print Date: 2019-04-09

Properties	Typical Data	Unit	Test Method
Rheological properties	dry / cond		
Molding shrinkage [parallel]	2 / *	%	Sim. to ISO 294-4
Molding shrinkage [normal]	2 / *	%	Sim. to ISO 294-4
Mechanical properties	dry / cond		
Tensile modulus	2900 / 1000	MPa	ISO 527-1/-2
Tensile modulus (120°C)	750 / -	MPa	ISO 527-1/-2
Tensile modulus (160°C)	650	MPa	ISO 527-1/-2
Tensile modulus (180°C)	600	MPa	ISO 527-1/-2
Tensile modulus (200°C)	560	MPa	ISO 527-1/-2
Yield stress	90 / 50	MPa	ISO 527-1/-2
Yield stress (120°C)	45	MPa	ISO 527-1/-2
Yield stress (160°C)	40	MPa	ISO 527-1/-2
Yield stress (180°C)	35	MPa	ISO 527-1/-2
Yield stress (200°C)	30	MPa	ISO 527-1/-2
Nominal strain at break	30 / >50	%	ISO 527-1/-2
Nominal strain at break (120°C)	>50	%	ISO 527-1/-2
Nominal strain at break (160°C)	>50	%	ISO 527-1/-2
Nominal strain at break (180°C)	>50	%	ISO 527-1/-2
Nominal strain at break (200°C)	>50	%	ISO 527-1/-2
Flexural modulus	2600 / 900	MPa	ISO 178
Charpy impact strength (+23°C)	N / N	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	150 / N	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	7 / 15	kJ/m²	ISO 179/1eA

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Charpy notched impact strength (-30°C)	5 / 5	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	7 / 14	kJ/m²	ISO 180/1A
Izod notched impact strength (-40°C)	5 / 5	kJ/m²	ISO 180/1A
Thermal properties	dry / cond		
Melting temperature (10°C/min)	295 / *	°C	ISO 11357-1/-3
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
Coeff. of linear therm. expansion (parallel)	0.85 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1.1 / *	E-4/°C	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	Yes / *	-	-
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	-	-
Thermal Index 5000 hrs	152	°C	IEC 60216/ISO 527-1/-2
Electrical properties	dry / cond		
Volume resistivity	1E12 / 1E7	Ohm*m	IEC 60093
Comparative tracking index	400 / -	V	IEC 60112
Other properties	dry / cond		
Humidity absorption	3.2 / *	%	Sim. to ISO 62
Density	1250 / -	kg/m³	ISO 1183

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Tens. fatigue 8Hz, T, R=0.1 , dry