

## Stanyl® TW241F10

## PA46-GF50

50% Glass Reinforced, Heat Stabilized, Lubricated

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Properties	Typical Data	Unit	Test Method
<b>Rheological properties</b>			
	dry / cond		
Molding shrinkage [parallel]	0.4/*	%	Sim. to ISO 294-4
Molding shrinkage [normal]	0.9/*	%	Sim. to ISO 294-4
<b>Mechanical properties</b>			
	dry / cond		
Tensile modulus	16000/10000	MPa	ISO 527-1/-2
Tensile modulus (120°C)	8200	MPa	ISO 527-1/-2
Tensile modulus (160°C)	7400	MPa	ISO 527-1/-2
Tensile modulus (180°C)	7000	MPa	ISO 527-1/-2
Tensile modulus (200°C)	6600	MPa	ISO 527-1/-2
Stress at break	250/160	MPa	ISO 527-1/-2
Stress at break (120°C)	140	MPa	ISO 527-1/-2
Stress at break (160°C)	120	MPa	ISO 527-1/-2
Stress at break (180°C)	110	MPa	ISO 527-1/-2
Stress at break (200°C)	100	MPa	ISO 527-1/-2
Strain at break	2.7/5	%	ISO 527-1/-2
Strain at break (120°C)	5	%	ISO 527-1/-2
Strain at break (160°C)	5	%	ISO 527-1/-2
Strain at break (180°C)	5	%	ISO 527-1/-2
Strain at break (200°C)	5	%	ISO 527-1/-2
Flexural modulus	14000/9000	MPa	ISO 178
Flexural modulus (120°C)	7300	MPa	ISO 178

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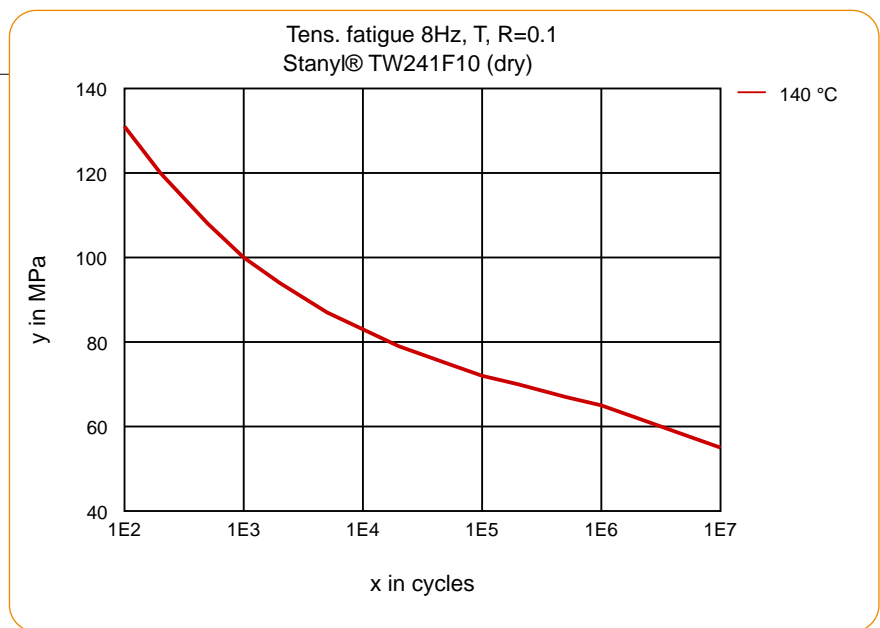


Properties	Typical Data	Unit	Test Method
Flexural modulus (160°C)	6500	MPa	ISO 178
Charpy impact strength (+23°C)	100/110	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	90/100	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	16/24	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	14/14	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength (+23°C)	16/24	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength (-40°C)	14/14	kJ/m <sup>2</sup>	ISO 180/1A
<b>Thermal properties</b>			
	dry / cond		
Melting temperature (10°C/min)	295/*	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	290/*	°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)	0.25/*	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.4/*	E-4/°C	ISO 11359-1/-2
Burning Beh. 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 Beh. at thickness h	HB/*	class	IEC 60695-11-10
Thickness tested	0.75/*	mm	IEC 60695-11-10
UL recognition	Yes/*	-	-
Relative Temperature Index - electrical	65	°C	UL746B
RTI electrical (Thickness (1) tested)	0.75	mm	UL746B
Thermal Index 5000 hrs	177	°C	IEC 60216/ISO 527-1/-2
<b>Electrical properties</b>			
	dry / cond		
Volume resistivity	1E12/1E8	Ohm*m	IEC 60093
Electric strength	30/20	kV/mm	IEC 60243-1
Comparative tracking index	300/-	-	IEC 60112
Relative permittivity (100Hz)	4.3/16	-	IEC 60250

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Properties	Typical Data	Unit	Test Method
Relative permittivity (1 MHz)	4/4.7	-	IEC 60250
<b>Other properties</b>			
Humidity absorption	dry / cond		
	1.85/*	%	Sim. to ISO 62
Density	1620/-	kg/m <sup>3</sup>	ISO 1183

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



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