

Stanyl® TW241F10

Property Data

PA46-GF50

50% Glass Reinforced, Heat Stabilized

Properties	Typical Data	Unit	Test Method
RHEOLOGICAL PROPERTIES			
	dry / cond		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294-4
Molding shrinkage (normal)	0.9 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	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
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
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
Flexural modulus	14000 / 9000	MPa	ISO 178
Flexural modulus (120°C)	7300	MPa	ISO 178
Flexural modulus (160°C)	6500	MPa	ISO 178
Charpy impact strength (+23°C)	90 / 100	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	80 / 80	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	16 / 24	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	12 / 12	kJ/m ²	ISO 179/1eA
Izod notched impact strength (23°C)	16 / 24	kJ/m ²	ISO 180/1A
Izod notched impact strength (-40°C)	12 / 12	kJ/m ²	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)	290 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.2 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.8 / *	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	UL / *	-	-
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Thermal Index 5000 hrs	177	°C	IEC 60216/ISO 527-1/-2
ELECTRICAL PROPERTIES			
	dry / cond		
Volume resistivity	1E12 / 1E8	Ohm*m	IEC 60093
Electric strength	30 / 20	kV/mm	IEC 60243-1
Comparative tracking index	300 / 300	-	IEC 60112

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OTHER PROPERTIES

dry / cond

Humidity absorption	1.8 / *	%	Sim. to ISO 62
Density	1620 / -	kg/m ³	ISO 1183

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