

# Stanyl® TW241F12

## Property Data

PA46-GF60

60% Glass Reinforced, Heat Stabilized, Good Flow

Properties	Typical Data	Unit	Test Method
<b>RHEOLOGICAL PROPERTIES</b>			
	dry / cond		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294-4
Molding shrinkage (normal)	0.7 / *	%	ISO 294-4
<b>MECHANICAL PROPERTIES</b>			
	dry / cond		
Tensile modulus	20000 / 12000	MPa	ISO 527-1/-2
Tensile modulus (120°C)	10000	MPa	ISO 527-1/-2
Tensile modulus (160°C)	9100	MPa	ISO 527-1/-2
Stress at break	255 / 170	MPa	ISO 527-1/-2
Stress at break (120°C)	150	MPa	ISO 527-1/-2
Stress at break (160°C)	125	MPa	ISO 527-1/-2
Strain at break	2 / 3	%	ISO 527-1/-2
Strain at break (120°C)	3	%	ISO 527-1/-2
Strain at break (160°C)	3	%	ISO 527-1/-2
Flexural modulus	17000 / 10000	MPa	ISO 178
Charpy impact strength (+23°C)	90 / 100	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	80 / 80	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	19 / 20	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	19 / 19	kJ/m <sup>2</sup>	ISO 179/1eA
<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
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
Thermal Index 5000 hrs	177	°C	IEC 60216/ISO 527-1/-2
<b>OTHER PROPERTIES</b>			
	dry / cond		
Humidity absorption	1.4 / *	%	Sim. to ISO 62
Density	1760 / -	kg/m <sup>3</sup>	ISO 1183

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