

Stanyl® TW200B6

PA46-CF30

30% Carbon Reinforced, Heat Stabilized, Lubricated

Print Date: 2019-10-16

Properties	Typical Data	Unit	Test Method
Rheological properties			
	dry / cond		
Molding shrinkage (parallel)	0.2 / *	%	ISO 294-4
Molding shrinkage (normal)	0.9 / *	%	ISO 294-4
Mechanical properties			
	dry / cond		
Tensile modulus	24000 / 14200	MPa	ISO 527-1/-2
Tensile modulus (120°C)	11000 / -	MPa	ISO 527-1/-2
Tensile modulus (160°C)	10000	MPa	ISO 527-1/-2
Tensile modulus (180°C)	9500	MPa	ISO 527-1/-2
Stress at break	250 / 165	MPa	ISO 527-1/-2
Stress at break (120°C)	135 / -	MPa	ISO 527-1/-2
Stress at break (160°C)	115	MPa	ISO 527-1/-2
Stress at break (180°C)	105	MPa	ISO 527-1/-2
Strain at break	2 / 4	%	ISO 527-1/-2
Strain at break (120°C)	3 / -	%	ISO 527-1/-2
Strain at break (160°C)	3	%	ISO 527-1/-2
Strain at break (180°C)	3	%	ISO 527-1/-2
Flexural modulus	20000 / 10000	MPa	ISO 178
Flexural strength	360 / 210	MPa	ISO 178
Charpy impact strength (+23°C)	60 / 75	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	50 / 50	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	8 / 14	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	6.5 / 6.5	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	8 / 14	kJ/m ²	ISO 180/1A

Properties	Typical Data	Unit	Test Method
Izod notched impact strength (-40°C)	6.5 / 6.5	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)	0.08 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.34 / *	E-4/°C	ISO 11359-1/-2

Electrical properties

dry / cond

Volume resistivity	1 / -	Ohm*m	IEC 60093
--------------------	-------	-------	-----------

Other properties

dry / cond

Humidity absorption	2.6 / *	%	Sim. to ISO 62
Density	1280 / -	kg/m ³	ISO 1183

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