

Stanyl® Diablo HDT2700 BK00001

PA46-GF40

40% Glass Reinforced, Heat Stabilized

Properties	Typical Data	Unit	Test Method
Rheological properties			
	dry / cond		
Molding shrinkage (parallel)	0.5 / *	%	ISO 294-4
Molding shrinkage (normal)	1 / *	%	ISO 294-4
Mechanical properties			
	dry / cond		
Tensile modulus	13500 / 7000	MPa	ISO 527-1/-2
Tensile modulus (120°C)	5400 / -	MPa	ISO 527-1/-2
Tensile modulus (160°C)	5000	MPa	ISO 527-1/-2
Tensile modulus (180°C)	4500	MPa	ISO 527-1/-2
Tensile modulus (200°C)	4000	MPa	ISO 527-1/-2
Stress at break	215 / 130	MPa	ISO 527-1/-2
Stress at break (120°C)	105 / -	MPa	ISO 527-1/-2
Stress at break (160°C)	85	MPa	ISO 527-1/-2
Stress at break (180°C)	75	MPa	ISO 527-1/-2
Stress at break (200°C)	60	MPa	ISO 527-1/-2
Strain at break	3 / 5.5	%	ISO 527-1/-2
Strain at break (120°C)	7 / -	%	ISO 527-1/-2
Strain at break (160°C)	8	%	ISO 527-1/-2
Strain at break (180°C)	8.5	%	ISO 527-1/-2
Strain at break (200°C)	9	%	ISO 527-1/-2
Flexural modulus	12000 / 7000	MPa	ISO 178
Flexural modulus (120°C)	5800	MPa	ISO 178
Flexural modulus (160°C)	5500	MPa	ISO 178
Flexural modulus (180°C)	5000	MPa	ISO 178



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Properties	Typical Data	Unit	Test Method
Flexural modulus (200°C)	4500	MPa	ISO 178
Flexural strength	330 / 170	MPa	ISO 178
Flexural strength (120°C)	135	MPa	ISO 178
Flexural strength (160°C)	125	MPa	ISO 178
Flexural strength (180°C)	100	MPa	ISO 178
Flexural strength (200°C)	85	MPa	ISO 178
Charpy impact strength (+23°C)	80 / 90	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	65 / 75	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	13 / 20	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)	14 / 22	kJ/m ²	ISO 180/1A
Thermal properties		dry / cond	
Melting temperature (10°C/min)	285 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	263 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	275 / *	°C	ISO 75-1/-2
Other properties		dry / cond	
Humidity absorption	2.3 / *	%	Sim. to ISO 62
Density	1480 / -	kg/m ³	ISO 1183



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

