

Stanyl® Diablo OCD2100 BK27021

PA46-GF40

40% Glass Reinforced, Heat Stabilized

Print Date: 2022-11-17

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	13000 / 7000	MPa	ISO 527-1/-2
Tensile modulus (120°C)	5000 / -	MPa	ISO 527-1/-2
Tensile modulus (160°C)	4600	MPa	ISO 527-1/-2
Tensile modulus (180°C)	4200	MPa	ISO 527-1/-2
Tensile modulus (200°C)	3400	MPa	ISO 527-1/-2
Stress at break	210 / 125	MPa	ISO 527-1/-2
Stress at break (120°C)	100 / -	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 / 8	%	ISO 527-1/-2
Strain at break (120°C)	10 / -	%	ISO 527-1/-2
Strain at break (160°C)	11	%	ISO 527-1/-2
Strain at break (180°C)	12	%	ISO 527-1/-2
Strain at break (200°C)	12.5	%	ISO 527-1/-2
Flexural modulus	13000 / 7000	MPa	ISO 178
Flexural modulus (120°C)	5000	MPa	ISO 178
Flexural modulus (160°C)	4600	MPa	ISO 178
Flexural modulus (180°C)	4200	MPa	ISO 178

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Property Data

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Properties	Typical Data	Unit	Test Method
Flexural modulus (200°C)	3400	MPa	ISO 178
Flexural strength	330 / -	MPa	ISO 178
Flexural strength (120°C)	115	MPa	ISO 178
Flexural strength (160°C)	100	MPa	ISO 178
Flexural strength (180°C)	90	MPa	ISO 178
Flexural strength (200°C)	75	MPa	ISO 178
Charpy impact strength (+23°C)	90 / 105	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)	15 / 25	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)	15 / 25	kJ/m ²	ISO 180/1A
Thermal properties		dry / cond	
Melting temperature (10°C/min)	282 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	256 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	270 / *	°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)	0.5 / *	E-4/°C	ISO 11359-1/-2
Electrical properties		dry / cond	
Comparative tracking index	300 / -	V	IEC 60112
Other properties		dry / cond	
Humidity absorption	2.2 / *	%	Sim. to ISO 62
Density	1480 / -	kg/m ³	ISO 1183

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