

Stanyl® Diablo OCD2100

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	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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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/m²	ISO 179/1eU
Charpy impact strength (–30°C)	65 / 75	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	15 / 25	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	12 / 12	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	15 / 25	kJ/m²	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/m³	ISO 1183

