

Stanyl[®] Diablo OCD2300

PA46–GF50

50% Glass Reinforced, Heat Stabilized

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
RHEOLOGICAL PROPERTIES			
	<i>DRY / COND</i>		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294–4
Molding shrinkage (normal)	0.9 / *	%	ISO 294–4
MECHANICAL PROPERTIES			
	<i>DRY / COND</i>		
Tensile modulus	17000 / 8000	MPa	ISO 527–1/–2
Tensile modulus (120°C)	6700 / –	MPa	ISO 527–1/–2
Tensile modulus (160°C)	5800	MPa	ISO 527–1/–2
Tensile modulus (180°C)	5300	MPa	ISO 527–1/–2
Tensile modulus (200°C)	4300	MPa	ISO 527–1/–2
Stress at break	240 / 135	MPa	ISO 527–1/–2
Stress at break (120°C)	110 / –	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	2.4 / 6.3	%	ISO 527–1/–2
Strain at break (120°C)	7.5 / –	%	ISO 527–1/–2
Strain at break (160°C)	8.5	%	ISO 527–1/–2
Strain at break (180°C)	9	%	ISO 527–1/–2
Strain at break (200°C)	9.5	%	ISO 527–1/–2
Flexural modulus	17000 / 8000	MPa	ISO 178
Flexural modulus (120°C)	6900	MPa	ISO 178
Flexural modulus (160°C)	6100	MPa	ISO 178
Flexural modulus (180°C)	5600	MPa	ISO 178

Property Data

Stanyl® Diablo OCD2300

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Flexural modulus (200°C)	4500	MPa	ISO 178
Flexural strength	370 / 205	MPa	ISO 178
Flexural strength (120°C)	145	MPa	ISO 178
Flexural strength (160°C)	110	MPa	ISO 178
Flexural strength (180°C)	95	MPa	ISO 178
Flexural strength (200°C)	75	MPa	ISO 178
Charpy impact strength (+23°C)	95 / 110	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	80 / 95	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	17 / 30	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	14 / 14	kJ/m ²	ISO 179/1eA
<i>THERMAL PROPERTIES</i>			
	<i>DRY / COND</i>		
Melting temperature (10°C/min)	275 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	260 / *	°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)	0.4 / *	E-4/°C	ISO 11359-1/-2
<i>OTHER PROPERTIES</i>			
	<i>DRY / COND</i>		
Humidity absorption	2.2 / *	%	Sim. to ISO 62
Density	1620 / -	kg/m ³	ISO 1183