

**Stanyl® Diablo OCD2100 BK27021**

PA46-GF40

DSM Engineering Plastics

**Product Texts**

40% Glass Reinforced, Heat Stabilized

ISO 1043 PA46-GF40

[Stanyl website](#)

<b>Rheological properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Molding shrinkage, parallel	0.5 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577
<b>Mechanical properties</b>			
<b>ISO Data</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
	Tensile Modulus	13000 / 7000	MPa
	Stress at break	210 / 125	MPa
	Strain at break	3 / 8	%
	Charpy impact strength (+23°C)	90 / 105	kJ/m <sup>2</sup>
	Charpy impact strength, -30°C	65 / 75	kJ/m <sup>2</sup>
	Charpy notched impact strength (+23°C)	15 / 25	kJ/m <sup>2</sup>
	Charpy notched impact strength, -30°C	12 / 12	kJ/m <sup>2</sup>
<b>Thermal properties</b>			
<b>ISO Data</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
	Melting temperature (10°C/min)	282 / *	°C
	Glass transition temperature, 10°C/min	70 / *	°C
	Temp. of deflection under load (1.80 MPa)	256 / *	°C
	Coeff. of linear therm. expansion, parallel	25 / *	E-6/K
<b>Electrical properties</b>			
<b>ISO Data</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
	Comparative tracking index	300 / -	-
<b>Other properties</b>			
<b>ISO Data</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
	Water absorption	6.7 / *	%
	Humidity absorption	2.2 / *	%
<b>Material specific properties</b>			
<b>ISO Data</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
	Viscosity number	155 / *	cm <sup>3</sup> /g
<b>Rheological calculation properties</b>			
<b>ISO Data</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
	Density of melt	1320	kg/m <sup>3</sup>
	Thermal conductivity of melt	0.314	W/(m K)
	Spec. heat capacity of melt	2130	J/(kg K)
	Eff. thermal diffusivity	1.12E-7	m <sup>2</sup> /s

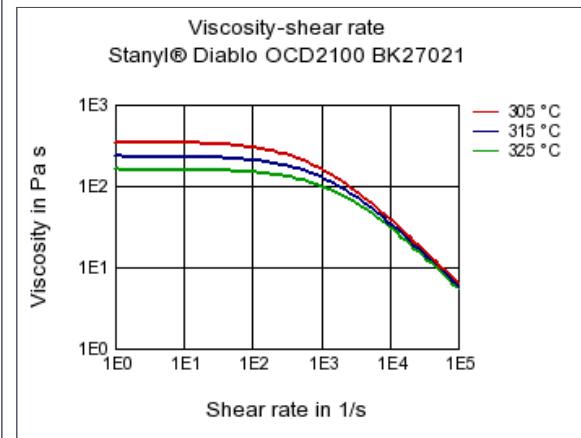
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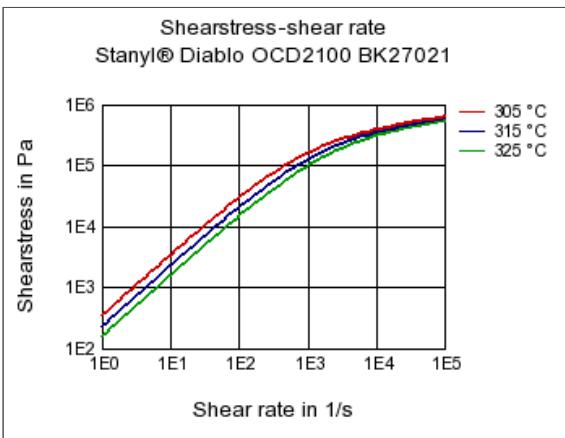
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## Diagrams

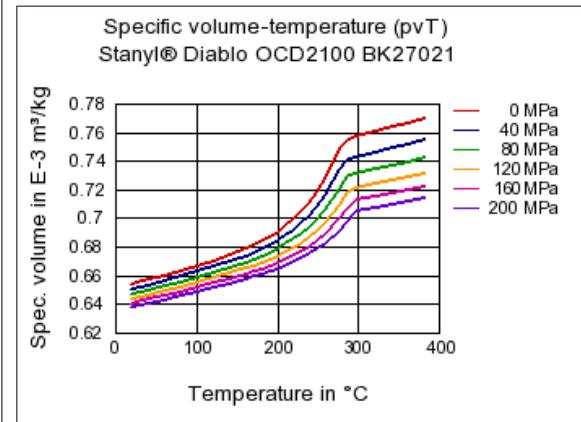
### Viscosity-shear rate



### Shearstress-shear rate



### Specific volume-temperature (pvT)



## Characteristics

### Processing

Injection Molding

### Additives

Lubricants, Release agent

### Delivery form

Pellets

### Special Characteristics

Heat stabilized or stable to heat

## Other text information

### Injection Molding

#### Injection Molding Recommendations