


Stanyl® Diablo OCD2100 BK27021

PA46-GF40

DSM Engineering Plastics

Product Texts

40% Glass Reinforced, Heat Stabilized

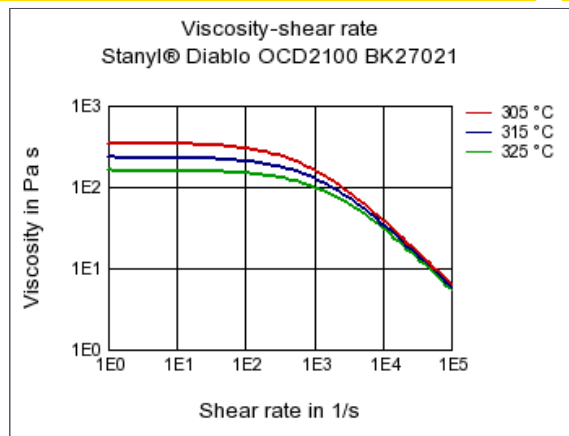
ISO 1043 PA46-GF40

[Stanyl website](#)

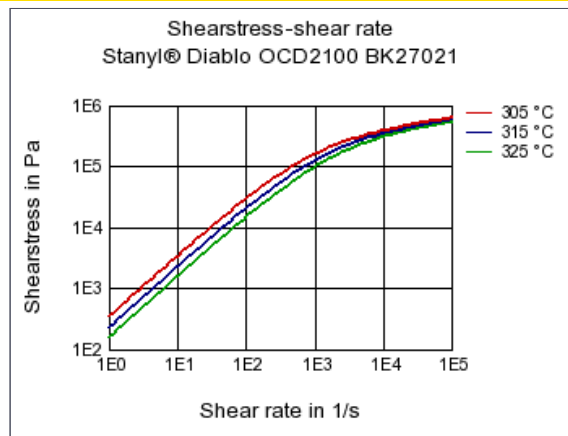
| Rheological properties | dry / cond | Unit | Test Standard |
|---|--------------|--------------------|---------------------|
| ISO Data | | | |
| Molding shrinkage, parallel | 0.5 / * | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | 1.0 / * | % | ISO 294-4, 2577 |
| Mechanical properties | | | |
| ISO Data | | | |
| Tensile Modulus | 13000 / 7000 | MPa | ISO 527-1/-2 |
| Stress at break | 210 / 125 | MPa | ISO 527-1/-2 |
| Strain at break | 3 / 8 | % | ISO 527-1/-2 |
| 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 |
| Thermal properties | | | |
| ISO Data | | | |
| Melting temperature (10°C/min) | 282 / * | °C | ISO 11357-1/-3 |
| Glass transition temperature, 10°C/min | 70 / * | °C | ISO 11357-1/-2 |
| Temp. of deflection under load (1.80 MPa) | 256 / * | °C | ISO 75-1/-2 |
| Coeff. of linear therm. expansion, parallel | 25 / * | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | 50 / * | E-6/K | ISO 11359-1/-2 |
| Electrical properties | | | |
| ISO Data | | | |
| Comparative tracking index | 300 / - | - | IEC 60112 |
| Other properties | | | |
| ISO Data | | | |
| Water absorption | 6.7 / * | % | Sim. to ISO 62 |
| Humidity absorption | 2.2 / * | % | Sim. to ISO 62 |
| Density | 1480 / - | kg/m ³ | ISO 1183 |
| Material specific properties | | | |
| ISO Data | | | |
| Viscosity number | 155 / * | cm ³ /g | ISO 307, 1157, 1628 |
| Rheological calculation properties | | | |
| ISO Data | | | |
| Density of melt | 1320 | kg/m ³ | - |
| 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 ² /s | - |

Diagrams

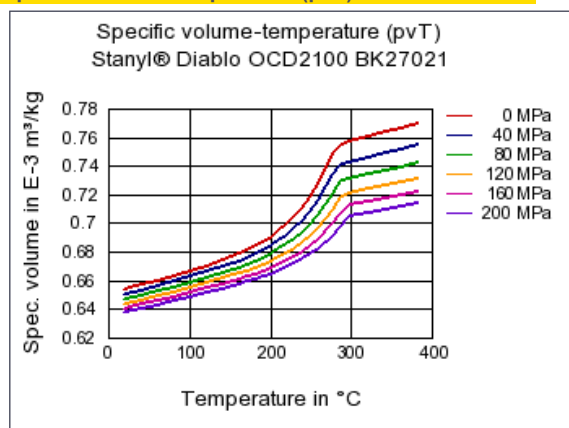
Viscosity-shear rate



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](#)