

Stanyl® TW341

PA46

Heat Stabilized, Lubricated

Print Date: 2016-04-01

| Properties | Typical Data | Unit | Test Method |
|---------------------------------|--------------|------|-------------------|
| Rheological properties | | | |
| | dry / cond | | |
| Molding shrinkage [parallel] | 2/* | % | Sim. to ISO 294-4 |
| Molding shrinkage [normal] | 2/* | % | Sim. to ISO 294-4 |
| Mechanical properties | | | |
| | dry / cond | | |
| Tensile modulus | 3300/1000 | MPa | ISO 527-1/-2 |
| Tensile modulus (120°C) | 800 | MPa | ISO 527-1/-2 |
| Tensile modulus (160°C) | 650 | MPa | ISO 527-1/-2 |
| Tensile modulus (180°C) | 600 | MPa | ISO 527-1/-2 |
| Tensile modulus (200°C) | 500 | MPa | ISO 527-1/-2 |
| Yield stress | 100/55 | MPa | ISO 527-1/-2 |
| Yield stress (120°C) | 50 | MPa | ISO 527-1/-2 |
| Yield stress (160°C) | 40 | MPa | ISO 527-1/-2 |
| Yield stress (180°C) | 35 | MPa | ISO 527-1/-2 |
| Yield stress (200°C) | 30 | MPa | ISO 527-1/-2 |
| Nominal strain at break | 40/>50 | % | ISO 527-1/-2 |
| Nominal strain at break (120°C) | >50 | % | ISO 527-1/-2 |
| Nominal strain at break (160°C) | >50 | % | ISO 527-1/-2 |
| Nominal strain at break (180°C) | >50 | % | ISO 527-1/-2 |
| Nominal strain at break (200°C) | >50 | % | ISO 527-1/-2 |
| Flexural modulus | 3000/900 | MPa | ISO 178 |
| Flexural modulus (120°C) | 800 | MPa | ISO 178 |

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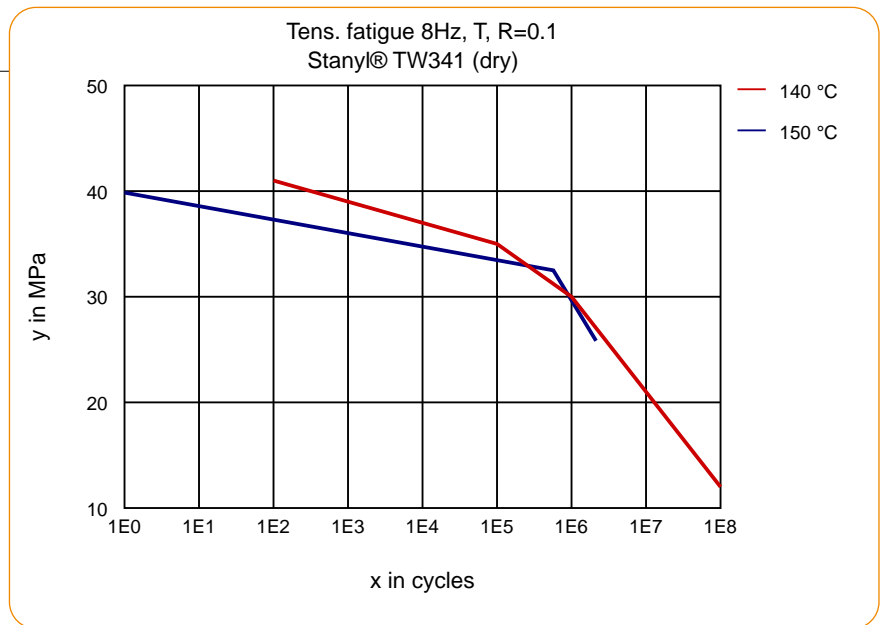


| Properties | Typical Data | Unit | Test Method |
|--|--------------|-------------------|------------------------|
| Flexural modulus (160°C) | 600 | MPa | ISO 178 |
| Charpy impact strength (+23°C) | N/N | kJ/m ² | ISO 179/1eU |
| Charpy impact strength (-30°C) | N/N | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength (+23°C) | 10/35 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength (-30°C) | 4/4 | kJ/m ² | ISO 179/1eA |
| Izod notched impact strength (+23°C) | 10/35 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength (-40°C) | 4/4 | kJ/m ² | ISO 180/1A |
| Thermal properties | | | |
| | dry / cond | | |
| Melting temperature (10°C/min) | 295/* | °C | ISO 11357-1/-3 |
| Temp. of deflection under load (1.80 MPa) | 190/* | °C | ISO 75-1/-2 |
| Temp. of deflection under load (0.45 MPa) | 280/* | °C | ISO 75-1/-2 |
| Coeff. of linear therm. expansion (parallel) | 0.85/* | E-4/°C | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion (normal) | 1.1/* | E-4/°C | ISO 11359-1/-2 |
| Burning Beh. at 1.5 mm nom. thickn. | V-2/* | class | IEC 60695-11-10 |
| Thickness tested | 1.5/* | mm | IEC 60695-11-10 |
| UL recognition | Yes/* | - | - |
| Burning Beh. at thickness h | V-2/* | class | IEC 60695-11-10 |
| Thickness tested | 0.75/* | mm | IEC 60695-11-10 |
| UL recognition | Yes/* | - | - |
| Relative Temperature Index - electrical | 150 | °C | UL746B |
| RTI electrical (Thickness (1) tested) | 0.75 | mm | UL746B |
| Thermal Index 5000 hrs | 152 | °C | IEC 60216/ISO 527-1/-2 |
| Electrical properties | | | |
| | dry / cond | | |
| Volume resistivity | 1E13/1E7 | Ohm*m | IEC 60093 |
| Electric strength | 25/15 | kV/mm | IEC 60243-1 |
| Comparative tracking index | 400/- | - | IEC 60112 |
| Relative permittivity (100Hz) | 3.9/22 | - | IEC 60250 |

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| Properties | Typical Data | Unit | Test Method |
|-------------------------------|--------------|-------------------|----------------|
| Relative permittivity (1 MHz) | 3.6/4.5 | - | IEC 60250 |
| Other properties | | | |
| | dry / cond | | |
| Humidity absorption | 3.7/* | % | Sim. to ISO 62 |
| Density | 1180/- | kg/m ³ | ISO 1183 |

Tens. fatigue 8Hz, T, R=0.1, dry



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