

TECAFIL PEI 1000 black - Filament

Chemical Designation

PEI (Polyetherimide)

Colour

black

Density

1.27 g/cm³

Main features

→ Standard spool body: OD Ø 200mm, width 55mm, Take up Ø52mm

| Mechanical properties | parameter | value | unit | norm | comment |
|---------------------------------------|-----------------------|--------------|-------------------|--------------------|----------------|
| Tensile strength at yield | 50 mm/min (yield) | 105 | MPa | DIN EN ISO 527-1 | |
| Tensile strength at yield | 5mm/min (break) | 85 | MPa | DIN EN ISO 527-1 | |
| Elongation at yield | 50 mm/min (yield) | 6 | % | DIN EN ISO 527-1 | |
| Elongation at yield | 50 mm/min (break) | 60 | % | DIN EN ISO 527-1 | |
| Notched impact strength (Izod) | notched 80*10*4 -30°C | 6 | kJ/m ² | - | |
| Notched impact strength (Izod) | notched 80*10*4 +23°C | 6 | kJ/m ² | DIN EN ISO 179-1eA | |
| Thermal properties | parameter | value | unit | norm | comment |
| Service temperature | short term | 200 | °C | - | |
| Service temperature | long term | 170 | °C | - | |
| Processing parameter | parameter | value | unit | norm | comment |
| Material temperature | | 370 - 410 | °C | - | |
| Predrying | parameter | value | unit | norm | comment |
| Permissible residual moisture content | | 0.02 | % | - | |
| Drying temperature | | 150 | °C | - | |
| Drying time | | 4 - 6 | h | - | |

→ To achieve optimum mechanical properties, it is recommended to pre-dry the material with the above mentioned parameters.

→ The filament should preferably be stored in dry, normal temperature rooms and protected from direct sunlight.

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