

PEEK – Polyetheretherketone PEEK GF40

AKROTEK® PEEK GF 40 natural (5068)

Tensile modulus

15000 MPa

1 mm/min

ISO 527-2

Stress at break

200 MPa

5 mm/min

ISO 527-2

Charpy impact strength

63 kJ/m²

23°C

ISO 179-1/1eU

AKROTEK® PEEK GF 40 natural (5068) is a 40% glass fibre reinforced polyetheretherketone with very high stiffness and strength

Typical applications

Elements in the automotive-, aeronautical-, industrial- and medical engineering that require high strength in a temperature environment above 150°C



Mechanical Properties

Tensile modulus (1 mm/min ISO 527-2) d.a.m.	15000 MPa
Stress at break (5 mm/min ISO 527-2) d.a.m.	200 MPa
Strain at break (5 mm/min ISO 527-2) d.a.m.	2,2 %
Flexural modulus (2 mm/min ISO 178) d.a.m.	14500 MPa
Flexural strength (2 mm/min ISO 178) d.a.m.	295 MPa
Flexural strain at break (2 mm/min ISO 178) d.a.m.	2,4 %
Charpy impact strength (23°C ISO 179-1/1eU) d.a.m.	63 kJ/m ²
Charpy notched impact strength (23°C ISO 179-1/1eA) d.a.m.	11 kJ/m ²



Thermal Properties

Temperature of deflection under load HDT/A (1,8 MPa ISO 75)	> 280 °C
Temperature of deflection under load HDT/C (8 MPa ISO 75)	220 °C
Melt temperature (DSC, 10K/min DIN EN 11357-1)	342 °C



Flammability

Burning rate (UL 94) 1,6mm Wall thickness	V-0 Class
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General properties

Density (23°C ISO 1183)	1,6 g/cm ³
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