

PAEK – Polyaryletherketone PEKK CF30

AKROTEK® PAEK CF 30 black (5216)

Tensile modulus

25000 MPa

1 mm/min

ISO 527-2

Stress at break

250 MPa

5 mm/min

ISO 527-2

Charpy impact strength

40 kJ/m²

23°C

ISO 179-1/1eU

AKROTEK® PAEK CF 30 black (5216) is a 30% carbon fibre reinforced polyetherketoneketone with high flexural strength and good sliding properties

Typical applications

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



Mechanical Properties

Tensile modulus (1 mm/min | ISO 527-2)

d.a.m.

25000 MPa

conditioned

25000 MPa

Stress at break (5 mm/min | ISO 527-2)

d.a.m.

250 MPa

conditioned

245 MPa

Strain at break (5 mm/min | ISO 527-2)

d.a.m.

1,5 %

conditioned

1,4 %

Flexural modulus (2 mm/min | ISO 178)

d.a.m.

24000 MPa

Flexural strength (2 mm/min | ISO 178)

d.a.m.

370 MPa

Flexural strain at break (2 mm/min | ISO 178)

d.a.m.

1,9 %

Charpy impact strength (23°C | ISO 179-1/1eU)

d.a.m.

40 kJ/m²

conditioned

40 kJ/m²

Charpy notched impact strength (23°C | ISO 179-1/1eA)

d.a.m.

6 kJ/m²

conditioned

6 kJ/m²



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)

195 °C

Melt temperature (DSC, 10K/min | DIN EN 11357-1)

340 °C



Flammability

Burning rate (UL 94)

1,6mm Wall thickness

V-0 Class

Disclaimer:

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General properties

Density (23°C | ISO 1183)

1,4 g/cm³

Humidity absorption (70°C, 62% r.H. | ISO 1110)

0,2 - 0,3 %

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