

AKROTEK® PEEK CF 10 TM black (7759)

Polyetheretherketone
AKRO-PLASTIC GmbH

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Technical Data

Product Description

AKROTEK® PEEK CF 10 TM black (7759) is a 10% carbon fibre reinforced medium viscosity polyetheretherketone with high flexural strength and good sliding properties as well as good tribological properties

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

General

Material Status	• Commercial: Active
Search for UL Yellow Card	• AKRO-PLASTIC GmbH
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight
Features	• High Strength • Low Friction • Medium Viscosity
Uses	• Aerospace Applications • Automotive Applications • Industrial Applications • Medical/Healthcare Applications
Appearance	• Black
Resin ID	• PEEK CF10

Physical	Nominal Value Unit	Test Method
Density (23°C)	1.44 g/cm ³	ISO 1183
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	13500 MPa	ISO 527-1/1
Tensile Stress (Break)	145 MPa	ISO 527-2/5
Tensile Strain (Break)	1.5 %	ISO 527-2/5
Flexural Modulus ²	13000 MPa	ISO 178
Flexural Stress ²	225 MPa	ISO 178
Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength (23°C)	4.0 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	25 kJ/m ²	ISO 179/1eU
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
1.8 MPa, Unannealed	> 280 °C	ISO 75-2/A
8.0 MPa, Unannealed	175 °C	ISO 75-2/C
Melting Temperature ³	342 °C	ISO 11357-3
Flammability	Nominal Value Unit	Test Method
Flame Rating (1.6 mm)	V-0	UL 94
Additional Information	Nominal Value Unit	Test Method
Reinforcement Content	10 %	ISO 1172

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 mm/min

³ 10°C/min

