

AKROTEK®

PK-VM ICF 15 black (6074)

PK CF15

AKROTEK® PK-VM ICF 15 black (6074) is a 15% carbon fibre reinforced polyketon with good sliding properties.

Features

hydrolysis / chemically stabilised

Properties

Modulus	Strength	Impact
9.000 MPa	90 MPa	30 kJ/m ²

Sustainability

Recycled content **15 %**

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min d.a.m.	9000 MPa
	1 mm/min conditioned	8800 MPa
Tensile stress at break ISO 527-2	5 mm/min d.a.m.	90 MPa
	5 mm/min conditioned	90 MPa
Tensile strain at break ISO 527-2	5 mm/min d.a.m.	1,5 %
	5 mm/min conditioned	1,5 %
Flexural modulus ISO 178	2 mm/min d.a.m.	8600 MPa
Flexural strength ISO 178	2 mm/min d.a.m.	120 MPa
Flexural strain at break ISO 178	2 mm/min d.a.m.	2 %

Charpy impact strength	23°C d.a.m.	30 kJ/m²
ISO 179-1/1eU	23°C conditioned	30 kJ/m²

Thermal Properties

Melting temperature	DSC, 10K/min	220 °C
ISO 11357-3		

General Properties

Density	23°C	1,26 g/cm³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	0,7 - 0,8 %
ISO 1110		

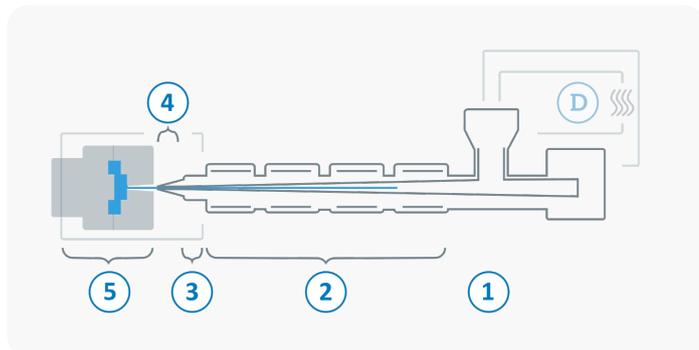
Molding shrinkage	flow	0,4 - 0,6 %
ISO 294-4	transverse	1,0 - 1,2 %

Electrical Properties

Surface resistivity	d.a.m.	10⁴ Ω
IEC 62631-3-2		

Processing

The values mentioned are recommendations. We only recommend desiccant / dry air dryers or vacuum dryers. Too long a drying time and the resulting residual moisture content below the lower limit can lead to filling problems and surface defects. The specified drying time refers to closed and undamaged bagged material. When processing from previously opened bags or from octabins with polyolefin inliners, a longer drying time may be necessary. It is recommended to check the residual moisture content after the drying process.



D	Drying time	0 - 4 h
	Drying temperature ($\tau \leq -30^{\circ}\text{C}$)	80 °C
	Processing moisture	0,02 - 0,1 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	220 - 260 °C
3	Nozzle temperature	230 - 260 °C
4	Melt temperature	230 - 260 °C
5	Mold temperature	60 - 120 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	30 - 70 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min

Diagrams

