

AKROMID® PRELIMINARY

B3 ICF 10 9 black (7220)

PA6 CF10

AKROMID® B3 ICF 10 9 black BMW (7220) is a 10% carbon fibre reinforced, heat stabilised and process optimised polyamide 6. Please refer to the product B3 ICF 10 9 black (7220) which is identical in composition and specification. The BMW item can only be supplied with approval from BMW for specially promoted projects.

Features

heat stabilised 130

Properties

Modulus	Strength	Impact
7.600 MPa	120 MPa	35 kJ/m ²

Sustainability

Recycled content **10 %**

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min d.a.m.	7600 MPa
Tensile stress at break ISO 527-2	5 mm/min d.a.m.	120 MPa
Tensile strain at break ISO 527-2	5 mm/min d.a.m.	3,0 %
Flexural modulus ISO 178	2 mm/min d.a.m.	7000 MPa
Charpy impact strength ISO 179-1/1eU	23°C d.a.m.	35 kJ/m²
Charpy notched impact strength ISO 179-1/1eA	23°C d.a.m.	4 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	190 °C
Melting temperature ISO 11357-3	DSC, 10K/min	220 °C

Flammability

Flammability UL 94	1,6 mm Wall thickness	HB Class
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+

General Properties

Density ISO 1183	23°C	1,17 g/cm ³
Molding shrinkage ISO 294-4	flow transverse	0,5 - 0,6 % 0,7 - 0,8 %

Rheological Properties

Flowability AKRO	1 mm Thickness	210 mm
----------------------------	----------------	--------

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	240 - 300 °C
3	Nozzle temperature	270 - 300 °C
4	Melt temperature	270 - 300 °C
5	Mold temperature	80 - 130 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min