

AKROMID® PRELIMINARY

B3 GF 50 black (8524)

PA6 GF50

AKROMID® B3 GF 50 black (8524) is a 50% glass fibre reinforced, heat stabilised, easy flowing polyamide 6 with very high stiffness and strength.

Features

easy flow

Properties

Modulus

15.500 MPa

Strength

230 MPa

Impact

100 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

15500 MPa

1 mm/min | conditioned

10300 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

230 MPa

5 mm/min | conditioned

145 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,5 %

5 mm/min | conditioned

4,1 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

100 kJ/m²

23°C | conditioned

110 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

19 kJ/m²

23°C | conditioned

25 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

220 °C

Temperature of deflection under load HDT/B

ISO 75

0,45 MPa

220 °C

Temperature of deflection under load HDT/C	8 MPa	185 °C
ISO 75		

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

Flammability

Flammability	1,6 mm Wall thickness	HB Class
UL 94		

General Properties

Density	23°C	1,56 g/cm³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	1,3 - 1,6 %
ISO 1110		

Water absorption	23°C, saturated	4,5 - 5,1 %
ISO 62		

Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,4 - 0,6 %

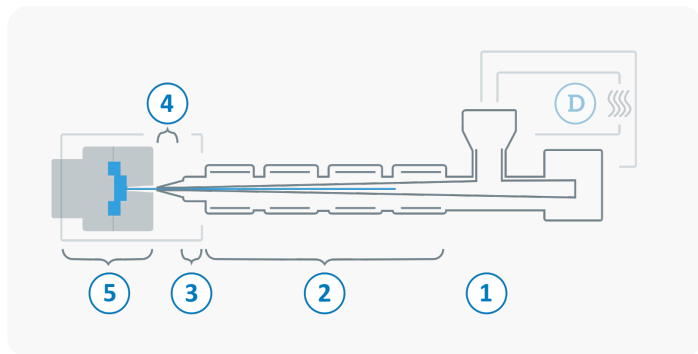
Electrical Properties

Volume resistivity	d.a.m.	10¹³ Ω x cm
IEC 62631-3-1		

Surface resistivity	d.a.m.	10¹² 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	240 - 290 °C
3	Nozzle temperature	260 - 300 °C
4	Melt temperature	270 - 290 °C
5	Mold temperature	80 - 100 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min

Diagrams

