

AKROMID®

B3 CGM 6/20 black (4362)

PA6 (CF6+GF20)

AKROMID® B3 CGM 6/20 black (4362) is a 20% glass fiber and 6% carbon fiber reinforced polyamide 6. The compound impresses with its electrical conductivity and has high rigidity and strength. It is therefore ideally suited for applications in the automotive sector and industry.

Features

antistatic/conductive metal substitution lightweight construction

Properties

Modulus

11.000 MPa

Strength

175 MPa

Impact

60 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

11000 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

175 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,5 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

60 kJ/m²

Thermal Properties

Melting temperature

ISO 11357-3

DSC, 10K/min

220 °C

Flammability

Flammability

UL 94

0,8 mm Wall thickness

HB Class

GWFI

IEC 60695-2-12

1,6 mm Wall thickness

650 °C

Burning rate (<100 mm/min)

FMVSS 302

> 1 mm Thickness

+

General Properties

Density

ISO 1183

23°C

1,3 g/cm³

Humidity absorption

ISO 1110

70°C, 62% r.H.

2,2-2,5 %

Water absorption

ISO 62

23°C, saturated

6,5-7,5 %

Molding shrinkage

ISO 294-4

flow

0,1 - 0,3 %

transverse

0,7 - 0,9 %

Electrical Properties

Volume resistivity

IEC 62631-3-1

d.a.m.

10³ - 10⁶ Ω x cm

Surface resistivity

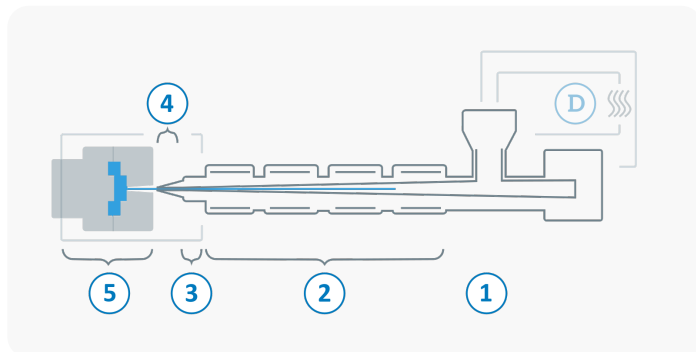
IEC 62631-3-2

d.a.m.

10³ - 10⁶ Ω

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

