

AKROMID® PRELIMINARY B3 GF 50 6 black (20028)

PA6 GF50

AKROMID® B3 GF 50 6 black (20028) is a 50% glass fibre reinforced, inorganic high temperature stabilised polyamide 6 with very high stiffness and strength

Features

heat stabilised 160

Properties

Modulus

16.000 MPa

Strength

200 MPa

Impact

85 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

16000 MPa

1 mm/min | conditioned

10000 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

200 MPa

5 mm/min | conditioned

140 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,5 %

5 mm/min | conditioned

4 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

85 kJ/m²

23°C | conditioned

95 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

12 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

ISO 75

8 MPa

185 °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

1,56 g/cm³

Humidity absorption

ISO 1110

70°C, 62% r.H.

1,3 - 1,6 %

Molding shrinkage

ISO 294-4

flow

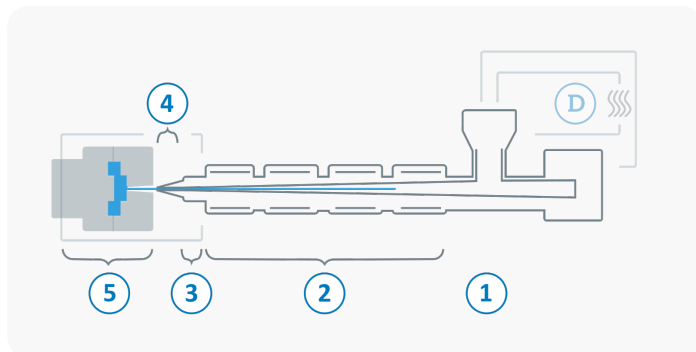
0,1 - 0,3 %

transverse

0,4 - 0,6 %

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

