

AKROMID®

B3 GF 30 1 L natural (4684)

PA6+PP GF30

AKROMID® B3 GF 30 1 L natural (4684) is a PA6/PP-blend with reduced density compared to standard PA6 with 30% glass fibre reinforcement. The material is suitable for components with high strength and stiffness where cost and weight reduction are required at the same time. The chemical resistance of AKROMID® B3 GF 30 1 L natural (4684) is particularly superior to calcium chloride (CaCl₂).

Features

heat stabilised 130 reduced density

Properties

Modulus

8.500 MPa

Strength

150 MPa

Impact

70 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

8500 MPa

1 mm/min | conditioned

6500 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

150 MPa

5 mm/min | conditioned

100 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3,2 %

5 mm/min | conditioned

3,7 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

8800 MPa

2 mm/min | conditioned

6500 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

210 MPa

2 mm/min | conditioned

150 MPa

Flexural strain at break

ISO 178

2 mm/min | d.a.m.

3 %

2 mm/min | conditioned

3,9 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

70 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

17 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

203 °C

Melting temperature

ISO 11357-3

DSC, 10K/min

220 °C

Flammability

Flammability

UL 94

0,8 mm Wall thickness

HB Class

Burning rate (<100 mm/min)

FMVSS 302

> 1 mm Thickness

+

General Properties

Density

ISO 1183

23°C

1,26 g/cm³

Molding shrinkage

ISO 294-4

flow

0,1 - 0,3 %

transverse

0,5 - 0,7 %

Rheological Properties

MVR

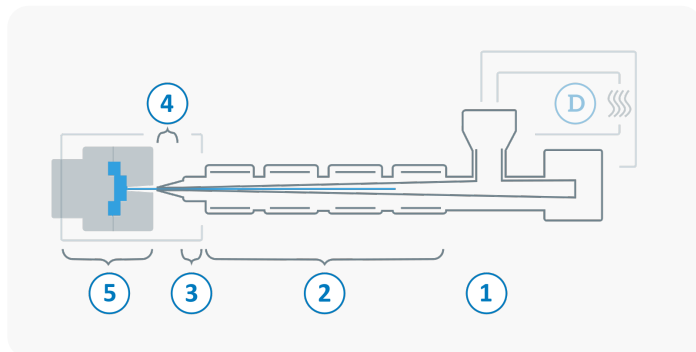
ISO 1133

275°C/5kg

14 cm³/10 min

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 - 290 °C
3	Nozzle temperature	240 - 300 °C
4	Melt temperature	240 - 290 °C
5	Mold temperature	70 - 100 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	5 - 15 m/min

Diagrams

