

AKROMID® PRELIMINARY

B3 GF 40 5 black (8725)

PA6 GF40

AKROMID® B3 GF 40 5 black (8725) is a 40% glass fiber reinforced polyamide 6. It is characterized by high rigidity and strength. This grade was developed as a successor of AKROMID® B3 GF 40 5 black (7286) to meet the stringent UV stability requirements for outdoor applications. In addition, the material is stabilized at high temperatures and is therefore ideally suited for technical components in mechanical engineering, the automotive and agricultural industries.

Features

heat stabilised 160 UV-stabilised

Properties

Modulus

12.500 MPa

Strength

200 MPa

Impact

95 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

12500 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

200 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

95 kJ/m²

Thermal Properties

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

1,45 g/cm³

Molding shrinkage

ISO 294-4

flow

0,1 - 0,3 %

transverse

0,5 - 0,7 %

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