

AKROMID® PRELIMINARY

B3 GF 30 ECO black (7923)

PA6 GF30

AKROMID® B3 GF 30 ECO black (7923) is a 30% glass fibre-reinforced, heat-stabilised polyamide 6. The material is suitable for technical components in mechanical engineering and automotive industry with demands for high stiffness and strength. The formulations of the sustainable ECO products are partly based on regenerated post-industrial feedstock and thus contribute to reducing the consumption of valuable raw materials.

Features

heat stabilised 130 recycled content Sports & leisure

Properties

Modulus

9.500 MPa

Strength

155 MPa

Impact

75 kJ/m²

Sustainability

Recycled content 30 %

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

9500 MPa

1 mm/min | conditioned

5700 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

155 MPa

5 mm/min | conditioned

100 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3 %

5 mm/min | conditioned

6 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

75 kJ/m²

23°C | conditioned

80 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

10 kJ/m²

23°C | conditioned

14 kJ/m²

Thermal Properties

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

Flammability

Flammability	1,6 mm Wall thickness	HB Class
UL 94		

Burning rate (<100 mm/min)	> 1 mm Thickness	+
FMVSS 302		

General Properties

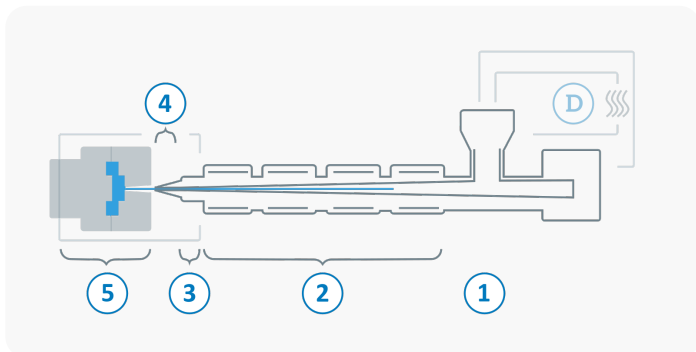
Density	23°C	1,37 g/cm³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	2,1 - 2,3 %
ISO 1110		

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