

AKROMID®

A3 GF 50 7 black (8571)

PA66 GF50

AKROMID® A3 GF 50 7 black (8571) is a 50% glass fibre-reinforced, heat-stabilised polyamide 6.6. of industrial quality. The material is suitable for technical components in mechanical engineering and the automotive industry with demands for high stiffness and strength.

Features

heat stabilised 130

Sports & leisure

Properties

Modulus

16.000 MPa

Strength

190 MPa

Impact

80 kJ/m²

Sustainability

Recycled content 30 %

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

16000 MPa

1 mm/min | conditioned

12000 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

190 MPa

5 mm/min | conditioned

120 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2 %

5 mm/min | conditioned

5 %

Charpy impact strength

ISO 179-1/eU

23°C | d.a.m.

80 kJ/m²

23°C | conditioned

95 kJ/m²

Charpy notched impact strength

ISO 179-1/eA

23°C | d.a.m.

12 kJ/m²

23°C | conditioned

14 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	260 °C
Temperature of deflection under load HDT/B ISO 75	0,45 MPa	260 °C
Melting temperature ISO 11357-3	DSC, 10K/min	262 °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	1,57 g/cm ³
Humidity absorption ISO 1110	70°C, 62% r.H.	1,3 - 1,5 %
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	260 - 300 °C
3	Nozzle temperature	270 - 310 °C
4	Melt temperature	280 - 300 °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