

AKROMID®

B3 GF 15 grey (6270)

PA6 GF15

AKROMID® B3 GF 15 grey (6270) is a 15% glass fibre reinforced polyamide 6 with average stiffness and strength.

Properties

Modulus

6.000 MPa

Strength

110 MPa

Impact

50 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

6000 MPa

1 mm/min | conditioned

3200 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

110 MPa

5 mm/min | conditioned

70 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,5 %

5 mm/min | conditioned

7,5 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

5000 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

170 MPa

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

50 kJ/m²

23°C | conditioned

90 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

6 kJ/m²

23°C | conditioned

10 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

205 °C

Temperature of deflection under load HDT/B	0,45 MPa	220 °C
ISO 75		

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

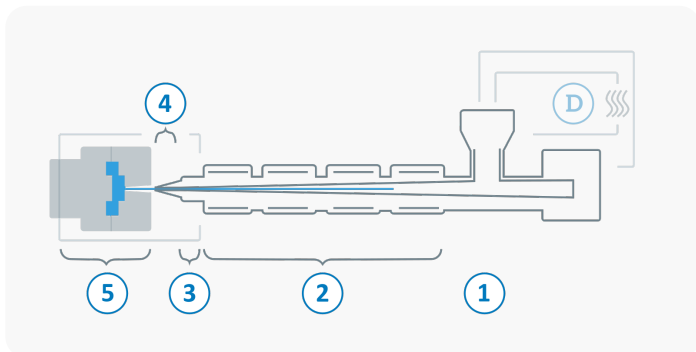
Density	23°C	1,24 g/cm³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	2,6 - 2,9 %
ISO 1110		

Molding shrinkage	flow	0,2 - 0,4 %
ISO 294-4	transverse	0,6 - 0,8 %

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