

AKROMID®

B28 GF 60 9 black (4662)

PA6 GF60

AKROMID® B28 GF 60 9 black (4662) is a 60% glass fibre reinforced, process improved, easy flowing polyamide 6 with very high stiffness and strength as well as improved surface quality. Colored without carbon black.

Features

surface modified easy flow process improved

Properties

Modulus

21.000 MPa

Strength

250 MPa

Impact

90 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

21000 MPa

1 mm/min | conditioned

13500 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

250 MPa

5 mm/min | conditioned

160 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,5 %

5 mm/min | conditioned

3,5 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

19000 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

370 MPa

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

90 kJ/m²

23°C | conditioned

95 kJ/m²

-30°C | d.a.m.

90 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

20 kJ/m²

23°C | conditioned

25 kJ/m²

-30°C | d.a.m.

20 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	220 °C
Temperature of deflection under load HDT/B ISO 75	0,45 MPa	220 °C
Melting temperature ISO 11357-3	DSC, 10K/min	220 °C
Coefficient of linear thermal expansion ISO 11359-1/2	23°C to 80°C parallel 23°C to 80°C transverse	0,13 10 ⁻⁴ /K 0,59 10 ⁻⁴ /K

Flammability

Flammability UL 94	0,8 mm Wall thickness	HB Class
GWFI IEC 60695-2-12	0,8 mm Wall thickness 3,2 mm Wall thickness	725 °C 960 °C
GWIT IEC 60695-2-13	0,8 mm Wall thickness 3,2 mm Wall thickness	750 °C 800 °C
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+

General Properties

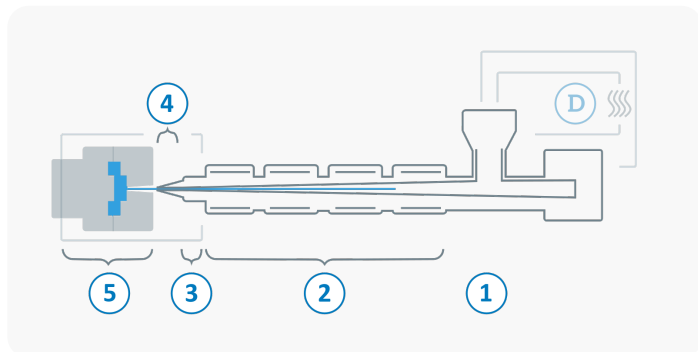
Density ISO 1183	23°C	1,7 g/cm ³
Humidity absorption ISO 1110	70°C, 62% r.H.	0,9 - 1,2 %
Molding shrinkage ISO 294-4	flow transverse	0,1 - 0,3 % 0,3 - 0,5 %

Rheological Properties

Flowability AKRO	1 mm Thickness 2 mm Thickness	140 mm 440 mm
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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