

AKROMID®

B+ GF 30 6 black (7387)

PA6 GF30

Anorganic, high-heat stabilized PA6 compound with enhanced mechanical properties in conditioned state to substitute PA 66 compounds

Features

heat stabilised 160

Properties

Modulus

9.500 MPa

Strength

180 MPa

Impact

86 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

9500 MPa

1 mm/min | conditioned

6000 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

180 MPa

5 mm/min | conditioned

118 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3,6 %

5 mm/min | conditioned

9 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

9200 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

270 MPa

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

86 kJ/m²

-30°C | d.a.m.

72 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

14 kJ/m²

23°C | conditioned

19 kJ/m²

-30°C | d.a.m.

11 kJ/m²

-30°C | conditioned

11 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	210 °C
Temperature of deflection under load HDT/B ISO 75	0,45 MPa	218 °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	0,19 10⁻⁴/K 1,14 10⁻⁴/K

General Properties

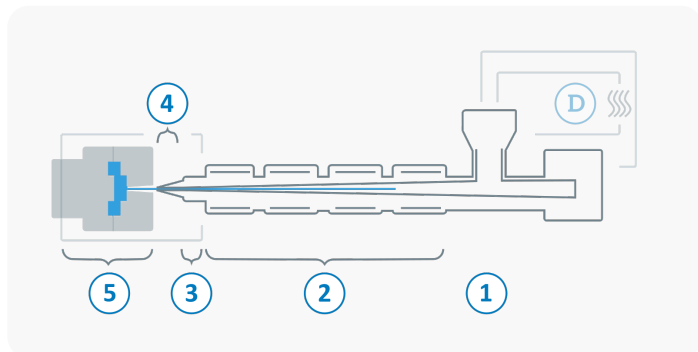
Density ISO 1183	23°C	1,35 g/cm³
Humidity absorption ISO 1110	70°C, 62% r.H.	1,9 - 2,1 %
Molding shrinkage ISO 294-4	flow transverse	0,1 - 0,3 % 0,5 - 0,7 %

Rheological Properties

Flowability AKRO	2 mm Thickness	480 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

Diagrams

