

AKROMID®

B3 GF 30 S1 black (1281)

PA6-I GF30

AKROMID® B3 GF 30 S1 black (1281) is a 30% glass fiber reinforced, impact modified Polyamide 6. It is characterised by high stiffness and strength as well as a higher impact strength compared to a standard PA 6 GF 30. The material is therefore perfectly suitable for industrial applications and for housings and covers in the automotive industry.

Features

impact modified

Properties

Modulus

8.800 MPa

Strength

150 MPa

Impact

85 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

8800 MPa

1 mm/min | conditioned

5500 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

150 MPa

5 mm/min | conditioned

90 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3,5 %

5 mm/min | conditioned

6 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

8300 MPa

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

85 kJ/m²

23°C | conditioned

100 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

15 kJ/m²

23°C | conditioned

20 kJ/m²

-30°C | d.a.m.

10 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A	1,8 MPa	190 °C
ISO 75		

Melting temperature	DSC, 10K/min	222 °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	1,35 g/cm³
ISO 1183		

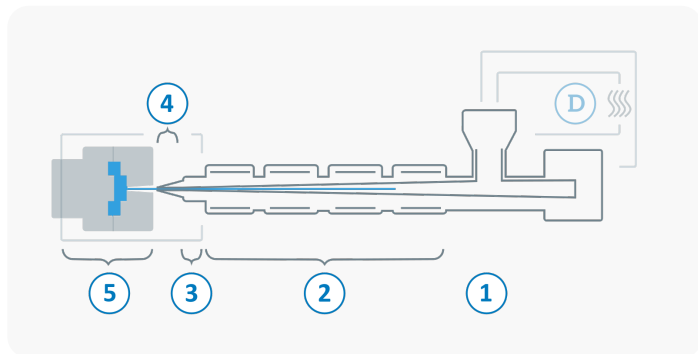
Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,5 - 0,7 %

Rheological Properties

MVR	275°C/5kg	25 cm³/10 min
ISO 1133		

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