

AKROMID®

A3 GK 30 6 black (6670)

PA66 GK30

AKROMID® A3 GK 30 6 black (6670) is a 30% glass beads filled and inorganic high temperature stabilised PA6.6. It is characterized by a high surface quality and low tendency to warp, which makes it suitable for use in technically demanding components in mechanical engineering and in the automotive industry.

Features

surface modified recycled content low warpage

Properties

Modulus

4.600 MPa

Strength

86 MPa

Impact

20 kJ/m²

Sustainability

Recycled content 30 %

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

4600 MPa

1 mm/min | conditioned

1700 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

86 MPa

5 mm/min | conditioned

52 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,2 %

5 mm/min | conditioned

40 %

Charpy impact strength

ISO 179-1/eU

23°C | d.a.m.

20 kJ/m²

23°C | conditioned

177 kJ/m²

-30°C | d.a.m.

21 kJ/m²

-30°C | conditioned

23 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

2 kJ/m²

23°C | conditioned

4 kJ/m²

-30°C | d.a.m.

2 kJ/m²

-30°C | conditioned

2 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

100 °C

Glass transition temperature

ISO 11357-2

DSC, 2nd heating

57 °C

Melting temperature

ISO 11357-3

DSC, 10K/min

262 °C

Flammability

Flammability

UL 94

1,6 mm Wall thickness

HB Class

GWFI

IEC 60695-2-12

1,6 mm Wall thickness

800 °C

GWIT

IEC 60695-2-13

1,6 mm Wall thickness

700 °C

Burning rate (<100 mm/min)

FMVSS 302

> 1 mm Thickness

+

General Properties

Density

ISO 1183

23°C

1,36 g/cm³

Humidity absorption

ISO 1110

70°C, 62% r.H.

2 %

Molding shrinkage

ISO 294-4

flow

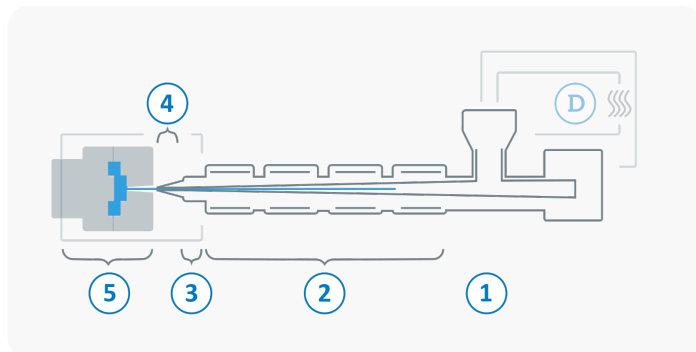
1,1 %

transverse

1,3 %

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