

AKROMID® PRELIMINARY

NEXT 5.6 3 GF 30 natural (8405)

PA5.6 GF30

AKROMID® NEXT 5.6 3 GF 30 natur (8405) is a HMD-free (hexamethylenediamine) alternative to PA 6.6. The partly bio-based material with 30% glass fibre is suitable for parts with high demands on stiffness and strength.

Features

Bio-based heat stabilised 130 Sports & leisure

Properties

Modulus

9.500 MPa

Strength

185 MPa

Impact

66 kJ/m²

Sustainability

Biobased carbon content 40 %

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

9500 MPa

1 mm/min | conditioned

5900 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

185 MPa

5 mm/min | conditioned

121 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,8 %

5 mm/min | conditioned

5,1 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

66 kJ/m²

23°C | conditioned

75 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

10 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

236 °C

Melting temperature

ISO 11357-3

DSC, 10K/min

254 °C

Flammability

Burning rate (<100 mm/min)

FMVSS 302

> 1 mm Thickness

+

General Properties

Density

ISO 1183

23°C

1,36 g/cm³

Humidity absorption

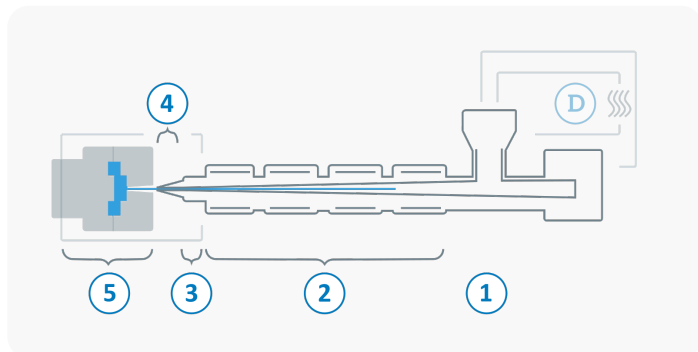
ISO 1110

70°C, 62% r.H.

2,2 %

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