

AKROMID® PRELIMINARY

NEXT 5.6 3 GF 30 S3 black (8444)

PA56 GF30

The partly bio-based AKROMID® NEXT 5.6 3 GF 30 S3 black (8444) is a HMD-free (hexamethylenediamine) alternative to PA 6.6. The dry-impact modified PA 5.6 with 30% glass fibre reinforcement is suitable for components with requirements on high strength and stiffness.

Features

Bio-based heat stabilised 130 impact modified Sports & leisure

Properties

Modulus

8.600 MPa

Strength

180 MPa

Impact

96 kJ/m²

Sustainability

Biobased carbon content 35 %

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

8600 MPa

1 mm/min | conditioned

5700 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

180 MPa

5 mm/min | conditioned

115 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3,5 %

5 mm/min | conditioned

8 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

96 kJ/m²

23°C | conditioned

98 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

15 kJ/m²

23°C | conditioned

22 kJ/m²

Thermal Properties

Melting temperature

ISO 11357-3

DSC, 10K/min

254 °C

General Properties

Density

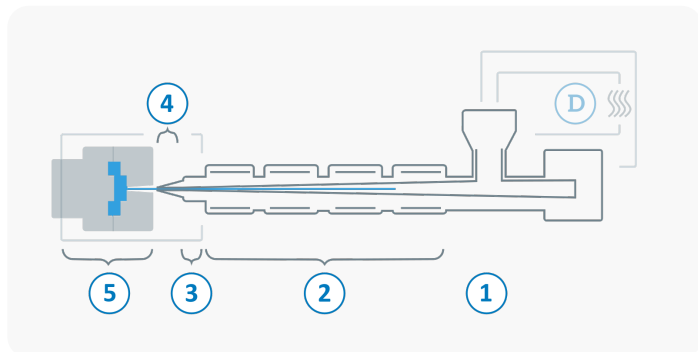
ISO 1183

23°C

1,32 g/cm³

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

Diagrams

