

AKROMID®

NEXT S3 GF 30 S1 black (8887)

PA610-I GF30

AKROMID® NEXT S3 GF 30 S1 black (8887) a partially biobased and impact modified PA6.10. With 15% glass fibre reinforcement, the material is suitable for household and industrial applications with high demands on strength, stiffness and impact strength. This sustainable grade is characterised by its low moisture absorption and high chemical resistance compared to classic PA6 and PA 6.

Features

Bio-based hydrolysis / chemically stabilised impact modified reduced moisture

Properties

Modulus

7.800 MPa

Strength

135 MPa

Impact

100 kJ/m²

Sustainability

Biobased carbon content **51 %**

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

7800 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

135 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

5 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

100 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

25 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	120 °C
Temperature of deflection under load HDT/B ISO 75	0,45 MPa	195 °C
Melting temperature ISO 11357-3	DSC, 10K/min	220 °C

General Properties

Density ISO 1183	23°C	1,27 g/cm ³
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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	240 - 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