

AKROMID® PRELIMINARY

NEXT B3 GF 30 1 L black (5212BMBCI)

PA6+PP GF30

AKROMID® NEXT B3 GF 30 1 L black (5212BMBCI) is a PA6/PP-blend with reduced density compared to standard PA6 GF 30. With 30% glass fibre reinforcement, the material is suitable for components with high strength and stiffness where weight reduction are required. The chemical resistance is particularly superior to calcium chloride (CaCl₂). The material is certified according to ISCC PLUS. 85% of the fossil raw materials required for manufacturing this product were replaced by sustainable biomass-balanced PP and PA (Allocation factor).

Features

- biomass balanced
- heat stabilised 130
- UV-stabilised
- reduced density

Regulatory



Properties

Modulus	Strength	Impact
9.000 MPa	135 MPa	58 kJ/m ²

Sustainability

Allocation factor

only valid for ISCC PLUS/REDcert² certified products

85 %

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

9000 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.

2,7 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

58 kJ/m²

Thermal Properties

Melting temperature ISO 11357-3	DSC, 10K/min	220 °C
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Flammability

Flammability UL 94	0,8 mm Wall thickness	HB Class
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Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+
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General Properties

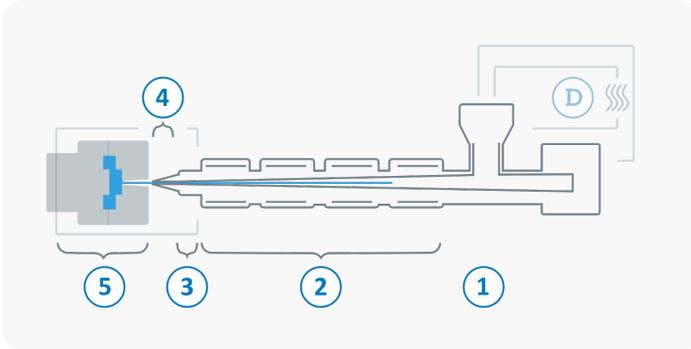
Density ISO 1183	23°C	1,26 g/cm³
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Humidity absorption ISO 1110	70°C, 62% r.H.	1,3 - 1,5 %
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Molding shrinkage ISO 294-4	flow	0,1 - 0,3 %
	transverse	0,5 - 0,7 %

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	220 - 290 °C
(3) Nozzle temperature	240 - 300 °C
(4) Melt temperature	240 - 290 °C
(5) Mold temperature	70 - 100 °C
(→) Holding pressure, spec.	300 - 800 bar
(←) Back pressure, spec.	50 - 150 bar
Injection speed	medium to high
Screw speed	5 - 15 m/min