

# AKROMID® PRELIMINARY

## B3 GF 35 ECO black (8472)

PA6 GF35

AKROMID® B3 GF 35 ECO black (8472) is a 35% glass fibre-reinforced, heat-stabilised polyamide 6. The material is suitable for technical components in mechanical engineering and automotive industry with demands for high stiffness and strength. The formulations of the sustainable ECO products are partly based on regenerated post-industrial feedstock and thus contribute to reducing the consumption of valuable raw materials.

### Features

heat stabilised 130   recycled content   Sports & leisure

### Properties

Modulus	Strength	Impact
10.500 MPa	160 MPa	82 kJ/m <sup>2</sup>

## Sustainability

Recycled content 30 %

## Mechanical Properties

<b>Tensile modulus</b> ISO 527-2	1 mm/min   d.a.m.	<b>10500 MPa</b>
	1 mm/min   conditioned	<b>6000 MPa</b>
<b>Tensile stress at break</b> ISO 527-2	5 mm/min   d.a.m.	<b>160 MPa</b>
	5 mm/min   conditioned	<b>100 MPa</b>
<b>Tensile strain at break</b> ISO 527-2	5 mm/min   d.a.m.	<b>3,2 %</b>
	5 mm/min   conditioned	<b>7,0 %</b>
<b>Charpy impact strength</b> ISO 179-1/1eU	23°C   d.a.m.	<b>82 kJ/m<sup>2</sup></b>
	23°C   conditioned	<b>85 kJ/m<sup>2</sup></b>
<b>Charpy notched impact strength</b> ISO 179-1/1eA	23°C   d.a.m.	<b>12 kJ/m<sup>2</sup></b>
	23°C   conditioned	<b>20 kJ/m<sup>2</sup></b>
	-30°C   d.a.m.	<b>12 kJ/m<sup>2</sup></b>

## Thermal Properties

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

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<b>Flammability</b> UL 94	1,6 mm Wall thickness	<b>HB Class</b>
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<b>Burning rate (&lt;100 mm/min)</b> FMVSS 302	> 1 mm Thickness	<b>+</b>
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## General Properties

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<b>Density</b> ISO 1183	23°C	<b>1,4 g/cm<sup>3</sup></b>
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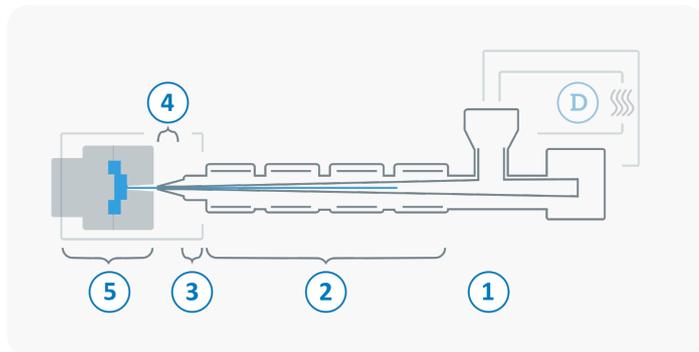
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<b>Molding shrinkage</b> ISO 294-4	flow	<b>0,1 - 0,3 %</b>
	transverse	<b>0,5 - 0,7 %</b>

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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.



<b>D</b>	Drying time	0 - 4 h
	Drying temperature ( $\tau \leq -30^{\circ}\text{C}$ )	80 °C
	Processing moisture	0,02 - 0,1 %
<b>1</b>	Feed section	60 - 80 °C
<b>2</b>	Temperature Zone 1 - Zone 4	240 - 290 °C
<b>3</b>	Nozzle temperature	260 - 300 °C
<b>4</b>	Melt temperature	270 - 290 °C
<b>5</b>	Mold temperature	80 - 100 °C
<b>→</b>	Holding pressure, spec.	300 - 800 bar
<b>←</b>	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min