

# AKROMID® PRELIMINARY

## B25 GF 60 natural (8326)

PA6 GF60

AKROMID® B25 GF 60 natural (8326) is a 60% glass fibre reinforced, easy flowing polyamide 6. The material impresses with its very high stiffness and strength and is therefore perfectly suitable for technical components in mechanical engineering and the automotive industry.

### Features

easy flow Sports & leisure

### Properties



## Mechanical Properties

<b>Tensile modulus</b>	1 mm/min   d.a.m.	<b>22000 MPa</b>
ISO 527-2	1 mm/min   conditioned	<b>14000 MPa</b>
<b>Tensile stress at break</b>	5 mm/min   d.a.m.	<b>255 MPa</b>
ISO 527-2	5 mm/min   conditioned	<b>170 MPa</b>
<b>Tensile strain at break</b>	5 mm/min   d.a.m.	<b>2,5 %</b>
ISO 527-2	5 mm/min   conditioned	<b>4 %</b>
<b>Flexural modulus</b>	2 mm/min   d.a.m.	<b>20000 MPa</b>
ISO 178		
<b>Flexural strength</b>	2 mm/min   d.a.m.	<b>400 MPa</b>
ISO 178		
<b>Charpy impact strength</b>	23°C   d.a.m.	<b>100 kJ/m<sup>2</sup></b>
ISO 179-1/1eU	23°C   conditioned	<b>100 kJ/m<sup>2</sup></b>
<b>Charpy notched impact strength</b>	23°C   d.a.m.	<b>20 kJ/m<sup>2</sup></b>
ISO 179-1/1eA	23°C   conditioned	<b>24 kJ/m<sup>2</sup></b>

## Thermal Properties

<b>Temperature of deflection under load HDT/A</b> ISO 75	1,8 MPa	220 °C
<b>Temperature of deflection under load HDT/B</b> ISO 75	0,45 MPa	220 °C
<b>Temperature of deflection under load HDT/C</b> ISO 75	8 MPa	190 °C
<b>Melting temperature</b> ISO 11357-3	DSC, 10K/min	220 °C
<b>Coefficient of linear thermal expansion</b> ISO 11359-1/2	23°C to 80°C   parallel 23°C to 80°C   transverse	0,13 10 <sup>-4</sup> /K 0,60 10 <sup>-4</sup> /K

## Flammability

<b>Flammability</b> UL 94	1,6 mm Wall thickness	HB Class
<b>GWFI</b> IEC 60695-2-12	1,6 mm Wall thickness	650 °C
<b>GWIT</b> IEC 60695-2-13	1,6 mm Wall thickness	675 °C

## General Properties

<b>Density</b> ISO 1183	23°C	1,7 g/cm <sup>3</sup>
<b>Humidity absorption</b> ISO 1110	70°C, 62% r.H.	0,9 - 1,2 %
<b>Molding shrinkage</b> ISO 294-4	flow transverse	0,1 - 0,3 % 0,3 - 0,5 %

## Electrical Properties

<b>Volume resistivity</b> IEC 62631-3-1	d.a.m. conditioned	10 <sup>13</sup> Ω x cm 10 <sup>10</sup> Ω x cm
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<b>Surface resistivity</b>	d.a.m.	<b>10<sup>12</sup> Ω</b>
IEC 62631-3-2	conditioned	<b>10<sup>10</sup> Ω</b>

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## Rheological Properties

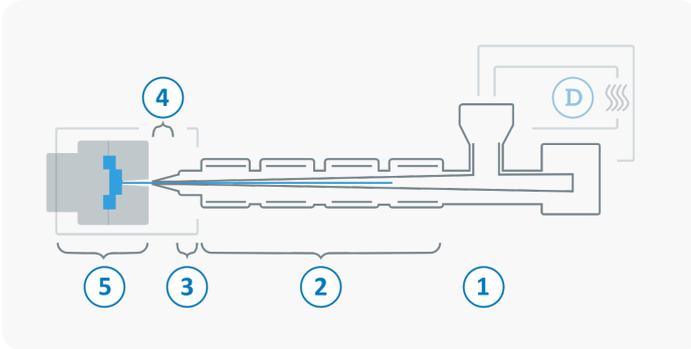
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<b>Flowability</b>	1 mm Thickness	<b>120 mm</b>
AKRO	2 mm Thickness	<b>420 mm</b>

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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

## Diagrams

