

# AKROMID® PRELIMINARY

## B3 GF 30 AM black (8917)

PA6 GF30

AKROMID® B3 GF 30 AM black (8917) is a 30% glass fiber reinforced polyamide 6 with high stiffness and good sliding properties as well as optimised viscosity. It is suitable for a stable additive manufacturing process (3D Printing) at fast production speeds.

### Features

surface modified   low warpage   process improved   3D printing / additive manufacturing

### Properties

Modulus

8.400 MPa

Strength

145 MPa

Impact

80 kJ/m<sup>2</sup>

## Mechanical Properties

### Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

8400 MPa

### Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

145 MPa

### Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

4 %

### Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

80 kJ/m<sup>2</sup>

### Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

12 kJ/m<sup>2</sup>

## Flammability

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UL 94

1,6 mm Wall thickness

HB Class

## General Properties

<b>Density</b> ISO 1183	23°C	1,36 g/cm <sup>3</sup>
<b>Humidity absorption</b> ISO 1110	70°C, 62% r.H.	2,1 - 2,3 %
<b>Water absorption</b> ISO 62	23°C, saturated	6,3 - 6,9 %
<b>Molding shrinkage</b> ISO 294-4	flow	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.



<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