

# AKROMID®

## B28 GF 30 6 LT black (6931)

PA6 GF30

AKROMID® B28 GF 30 6 LT black (6931) is a 30% glass fibre reinforced, easy flowing Polyamide 6. The material is characterised by high stiffness and strength. Furthermore, it is high heat stabilised and therefore perfectly suitable for automotive and industrial applications. The compound can be welded via laser welding.

### Features

heat stabilised 160    laser transparent

### Properties



## Mechanical Properties

<b>Tensile modulus</b>	1 mm/min   d.a.m.	<b>9800 MPa</b>
ISO 527-2	1 mm/min   conditioned	<b>6400 MPa</b>
<b>Tensile stress at break</b>	5 mm/min   d.a.m.	<b>185 MPa</b>
ISO 527-2	5 mm/min   conditioned	<b>100 MPa</b>
<b>Tensile strain at break</b>	5 mm/min   d.a.m.	<b>3 %</b>
ISO 527-2	5 mm/min   conditioned	<b>5,5 %</b>
<b>Flexural modulus</b>	2 mm/min   d.a.m.	<b>8000 MPa</b>
ISO 178		
<b>Flexural strength</b>	2 mm/min   d.a.m.	<b>250 MPa</b>
ISO 178		
<b>Charpy impact strength</b>	23°C   d.a.m.	<b>90 kJ/m<sup>2</sup></b>
ISO 179-1/1eU		
<b>Charpy notched impact strength</b>	23°C   d.a.m.	<b>12 kJ/m<sup>2</sup></b>
ISO 179-1/1eA		

## Thermal Properties

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<b>Temperature of deflection under load HDT/A</b>	1,8 MPa	210 °C
ISO 75		

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

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## Flammability

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<b>Flammability</b>	1,6 mm Wall thickness	<b>HB Class</b>
UL 94		

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<b>Burning rate (&lt;100 mm/min)</b>	> 1 mm Thickness	<b>+</b>
FMVSS 302		

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## General Properties

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<b>Density</b>	23°C	1,35 g/cm <sup>3</sup>
ISO 1183		

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<b>Humidity absorption</b>	70°C, 62% r.H.	2,1 - 2,3 %
ISO 1110		

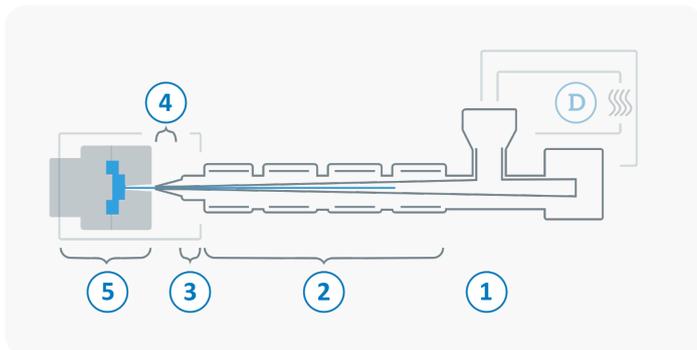
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<b>Molding shrinkage</b>	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,5 - 0,7 %

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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

