

# AKROMID® PRELIMINARY

## B28 GF 30 natural (6941)

PA 6 GF 30

AKROMID B28 GF 30 natural (6941) is a 30% glass fibre reinforced, easy flowing PA6. Due to its very good flowability, this grade has a good surface. It complies with the bus fire standard ECE R 118.03 annex 6 and 8 and is suitable for panels, seat shells, armrests and footrests where high stiffness and strength is required. The material is easy to colour.

### Features

easy flow

### Regulatory

**ECE118.03**

### Properties

Modulus	Strength	Impact
10.200 MPa	180 MPa	80 kJ/m <sup>2</sup>

## Mechanical Properties

<b>Tensile modulus</b>	1 mm/min   d.a.m.	<b>10200 MPa</b>
ISO 527-2	1 mm/min   conditioned	<b>6200 MPa</b>
<b>Tensile stress at break</b>	5 mm/min   d.a.m.	<b>180 MPa</b>
ISO 527-2	5 mm/min   conditioned	<b>102 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>8400 MPa</b>
ISO 178		
<b>Flexural strength</b>	2 mm/min   d.a.m.	<b>230 MPa</b>
ISO 178		
<b>Charpy impact strength</b>	23°C   d.a.m.	<b>80 kJ/m<sup>2</sup></b>
ISO 179-1/1eU	23°C   conditioned	<b>87 kJ/m<sup>2</sup></b>

## Thermal Properties

<b>Temperature of deflection under load HDT/A</b> ISO 75	1,8 MPa	210 °C
<b>Temperature of deflection under load HDT/B</b> ISO 75	0,45 MPa	220 °C
<b>Melting temperature</b> ISO 11357-3	DSC, 10K/min	220 °C

## Flammability

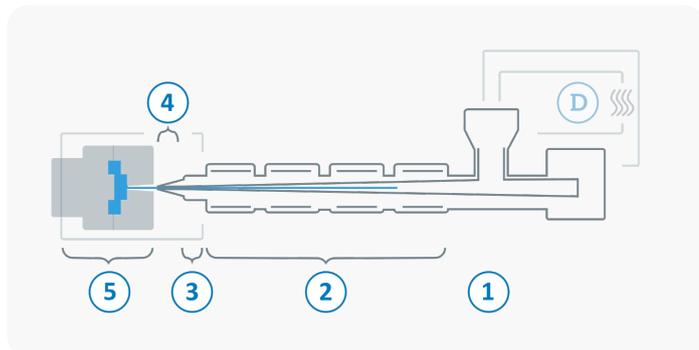
<b>Flammability</b> UL 94	0,4 mm Wall thickness	HB Class
	0,8 mm Wall thickness	HB Class
	1,6 mm Wall thickness	HB Class
	3,2 mm Wall thickness	HB Class
<b>Burning rate (&lt;100 mm/min)</b> FMVSS 302	> 1 mm Thickness	+
<b>Protection Bus</b> ECE 118		Appendix 6, 8

## General Properties

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