

# AKROMID® PRELIMINARY

## B3 GKM 40 natural (8630)

PA6 M40

AKROMID® B3 GKM 40 natur (8630) is a 40 % mineral and glass beads filled polyamide 6. The material is characterised by its excellent surface properties and low warpage. It is suitable for use in housings, switches and covers of all kinds in the sanitary industry and for automotive applications. This type is suitable for chrome plating and can also be used for 2K applications with TPV.

### Features

surface modified   low warpage   adhesion modified   metal substitution   Sports & leisure

### Properties

Modulus	Strength	Impact
4.900 MPa	70 MPa	150 kJ/m <sup>2</sup>

## Mechanical Properties

<b>Tensile modulus</b> ISO 527-2	1 mm/min   d.a.m.	<b>4900 MPa</b>
<b>Tensile stress at break</b> ISO 527-2	5 mm/min   d.a.m.	<b>70 MPa</b>
<b>Tensile strain at break</b> ISO 527-2	5 mm/min   d.a.m.	<b>15 %</b>
<b>Charpy impact strength</b> ISO 179-1/1eU	23°C   d.a.m.	<b>150 kJ/m<sup>2</sup></b>
<b>Charpy notched impact strength</b> ISO 179-1/1eA	23°C   d.a.m.	<b>5 kJ/m<sup>2</sup></b>

## Thermal Properties

<b>Temperature of deflection under load HDT/A</b> ISO 75	1,8 MPa	<b>90 °C</b>
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<b>Temperature of deflection under load HDT/B</b>	0,45 MPa	<b>190 °C</b>
ISO 75		

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<b>Melting temperature</b>	DSC, 10K/min	<b>220 °C</b>
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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## General Properties

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<b>Density</b>	23°C	<b>1,44 g/cm<sup>3</sup></b>
ISO 1183		

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

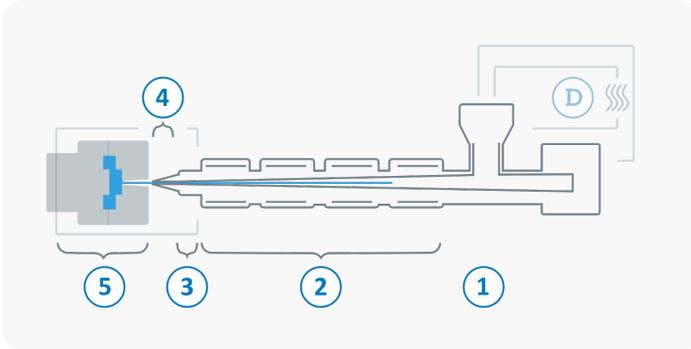
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<b>Molding shrinkage</b>	flow	<b>0,9 %</b>
ISO 294-4	transverse	<b>1,0 %</b>

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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