

# AKROMID®

## B3 GM 10/20 1 black (1829)

PA6 (GF10+GB20)

AKROMID® B3 GM 10/20 1 black 950058 (1829) is a 10% glass fibre reinforced, 20% glass bead filled, heat stabilised polyamide 6 with good surface and low warpage

### Features

heat stabilised 130   surface modified   low warpage

### Properties

Modulus	Strength	Impact
6.200 MPa	115 MPa	45 kJ/m <sup>2</sup>

## Mechanical Properties

<b>Tensile modulus</b> ISO 527-2	1 mm/min   d.a.m.	<b>6200 MPa</b>
	1 mm/min   conditioned	<b>3000 MPa</b>
<b>Tensile stress at break</b> ISO 527-2	5 mm/min   d.a.m.	<b>115 MPa</b>
	5 mm/min   conditioned	<b>60 MPa</b>
<b>Tensile strain at break</b> ISO 527-2	5 mm/min   d.a.m.	<b>3 %</b>
	5 mm/min   conditioned	<b>15 %</b>
<b>Charpy impact strength</b> ISO 179-1/1eU	23°C   d.a.m.	<b>45 kJ/m<sup>2</sup></b>
	23°C   conditioned	<b>90 kJ/m<sup>2</sup></b>
	-30°C   d.a.m.	<b>42 kJ/m<sup>2</sup></b>

## Thermal Properties

<b>Temperature of deflection under load HDT/A</b> ISO 75	1,8 MPa	<b>200 °C</b>
<b>Melting temperature</b> ISO 11357-3	DSC, 10K/min	<b>222 °C</b>

## Flammability

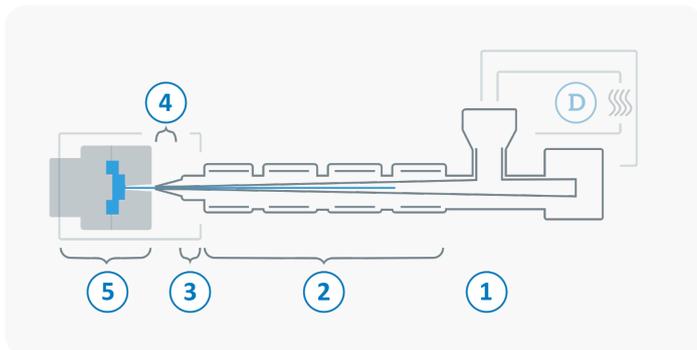
<b>Flammability</b> UL 94	1,6 mm Wall thickness	<b>HB Class</b>
<b>Burning rate (&lt;100 mm/min)</b> FMVSS 302	> 1 mm Thickness	<b>+</b>

## General Properties

<b>Density</b> ISO 1183	23°C	<b>1,35 g/cm<sup>3</sup></b>
<b>Humidity absorption</b> ISO 1110	70°C, 62% r.H.	<b>2 %</b>
<b>Water absorption</b> ISO 62	23°C, saturated	<b>7 %</b>
<b>Molding shrinkage</b> ISO 294-4	flow	<b>0,3 - 0,5 %</b>
	transverse	<b>0,5 - 0,7 %</b>

## 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.



Ⓓ	Drying time	0 - 4 h
	Drying temperature ( $\tau \leq -30^{\circ}\text{C}$ )	80 °C
	Processing moisture	0,02 - 0,1 %
①	Feed section	60 - 80 °C
②	Temperature Zone 1 - Zone 4	240 - 290 °C
③	Nozzle temperature	260 - 300 °C
④	Melt temperature	270 - 290 °C
⑤	Mold temperature	80 - 100 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min