

PA6 – Polyamide 6 PA6 GF20 FR(30)

**AKROMID® B3 K8 9 FR black (3942)**

Tensile modulus

**6000 MPa**

1 mm/min

ISO 527-2

Stress at break

**95 MPa**

5 mm/min

ISO 527-2

Charpy impact strength

**60 kJ/m<sup>2</sup>**

23°C

ISO 179-1/1eU

AKROMID® B3 K8 9 FR black (3942) is a 20% glassfibre reinforced, halogene free flameretardant polyamide 6 with flammability acc UL 94 V2.

**Typical applications**

Housings for Electro/Electronic industry.

**Mechanical Properties**

Tensile modulus (1 mm/min | ISO 527-2)

d.a.m.

6000 MPa

conditioned

3000 MPa

Stress at break (5 mm/min | ISO 527-2)

d.a.m.

95 MPa

conditioned

55 MPa

Strain at break (5 mm/min | ISO 527-2)

d.a.m.

3,9 %

conditioned

&gt;10 %

Charpy impact strength (23°C | ISO 179-1/1eU)

d.a.m.

60 kJ/m<sup>2</sup>

Charpy notched impact strength (23°C | ISO 179-1/1eA)

d.a.m.

6 kJ/m<sup>2</sup>**Thermal Properties**

Melt temperature (DSC, 10K/min | DIN EN 11357-1)

222 °C

**Flammability**

Burning rate (UL 94)

0,4mm Wall thickness

V-2 Class

0,8mm Wall thickness

V-2 Class

1,6mm Wall thickness

V-2 Class

3,2mm Wall thickness

V-2 Class

GWFI (IEC 60695-2-12)

0,4mm Wall thickness

960 °C

0,8mm Wall thickness

960 °C

1,6mm Wall thickness

960 °C

3,2mm Wall thickness

960 °C

**General properties**

Density (23°C | ISO 1183)

1,30 g/cm<sup>3</sup>

Molding shrinkage (flow | ISO 294-4)

0,5-0,7 %

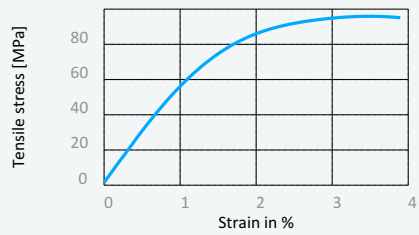
Molding shrinkage (transverse | ISO 294-4)

0,7-0,9 %

**Disclaimer:**

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Stress strain chart at 23°C



### Electrical Properties

Comparative tracking index (Test liquid A | IEC 60112)

550 V

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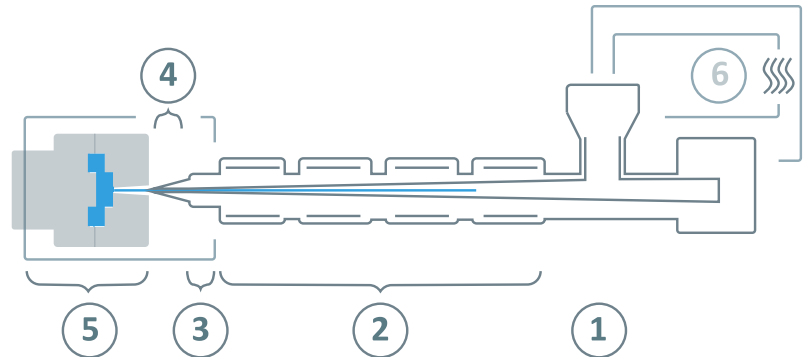
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### Processing information

The listed values are recommendations. Higher values should be used for higher glass loadings. We recommend only dehumidifying or vacuum dryers. Extensive drying can cause filling problems and surface defects.



⑥	Drying time	2 - 4 h
	Drying temperature ( $\tau \leq -30^{\circ}\text{C}$ )	80°C
	Processing moisture	0,02 - 0,08%
①	Feed section	60 - 80°C
②	Temperature zone 1 - Zone 4	220 - 280°C
③	Nozzle temperature	240 - 280°C
④	Melt temperature	240 - 280°C
⑤	Mold temperature	60 - 100°C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	30 - 100 bar
	Injection speed	medium
	Screw speed	5 - 10 m/min

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