

PA6 – Polyamide 6 PA6 GF40

AKROMID® B+ GF 40 1 LA black (7702)

Tensile modulus

12500 MPa

1 mm/min

ISO 527-2

Stress at break

200 MPa

5 mm/min

ISO 527-2

Charpy impact strength

100 kJ/m²

23°C

ISO 179-1/1eU

AKROMID® B+ GF 40 1 LA black (7702) is a 40% glass fibre reinforced, heat stabilised, laser markable polyamide 6 with high stiffness and strength

Typical applications

Mainly components in mechanical engineering and in the automotive industry.

**Mechanical Properties**

Tensile modulus (1 mm/min ISO 527-2) d.a.m.	12500 MPa
Stress at break (5 mm/min ISO 527-2) d.a.m.	200 MPa
Strain at break (5 mm/min ISO 527-2) d.a.m.	3,4 %
Charpy impact strength (23°C ISO 179-1/1eU) d.a.m.	100 kJ/m ²
Charpy notched impact strength (23°C ISO 179-1/1eA) d.a.m.	16 kJ/m ²

**Thermal Properties**

Temperature of deflection under load HDT/A (1,8 MPa ISO 75)	215 °C
Melting temperature (DSC, 10K/min DIN EN 11357-1)	220 °C

**Flammability**

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

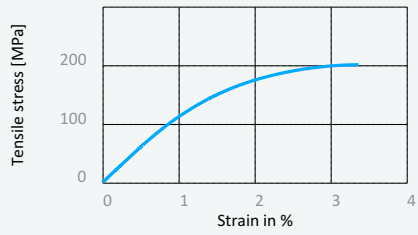
**General properties**

Density (23°C ISO 1183)	1,46 g/cm ³
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Disclaimer:

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Stress strain chart at 23°C



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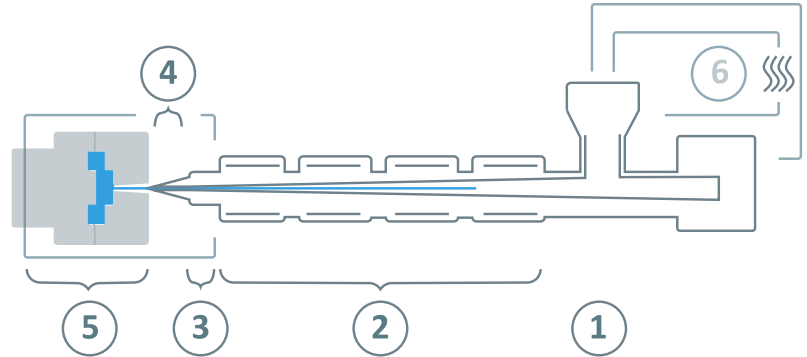
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Processing information

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	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

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