

PA6 – Polyamide 6 PA6 GF40

AKROMID® B3 GF 40 1 TM black (7744)

Tensile modulus

14500 MPa

1 mm/min

ISO 527-2

Stress at break

185 MPa

5 mm/min

ISO 527-2

Charpy impact strength

75 kJ/m²

23°C

ISO 179-1/1eU

AKROMID® B3 GF 40 1 TM black (7744) is a 40% glass fibre reinforced, heat stabilised, tribological modified polyamide 6 with high rigidity and strength

Typical applications

Sliding parts in mechanical engineering which require good tribological properties.



Mechanical Properties

Tensile modulus (1 mm/min ISO 527-2) d.a.m.	14500 MPa
Stress at break (5 mm/min ISO 527-2) d.a.m.	185 MPa
Strain at break (5 mm/min ISO 527-2) d.a.m.	2,5 %
Charpy impact strength (23°C ISO 179-1/1eU) d.a.m.	75 kJ/m ²



Thermal Properties

Temperature of deflection under load HDT/A (1,8 MPa ISO 75)	215 °C
Temperature of deflection under load HDT/B (0,45 MPa ISO 75)	220 °C
Melt 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)	1,50 g/cm ³
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Disclaimer:

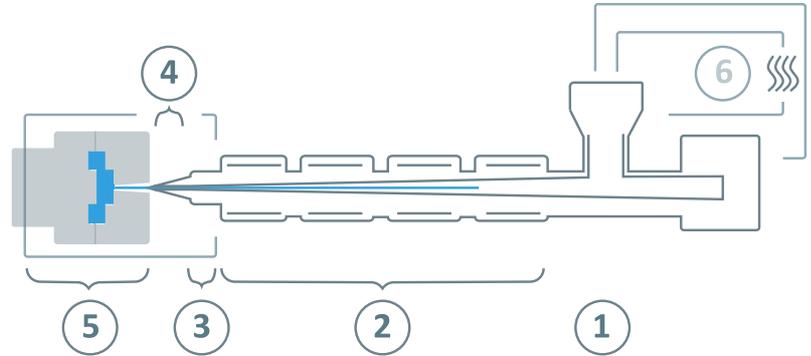
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Processing information

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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