

PA6 – Polyamide 6 PA6 + PP GF40

AKROMID® B3 GF 40 8 L natural (7817)

Tensile modulus

12000 MPa

1 mm/min
ISO 527-2

Stress at break

175 MPa

5 mm/min
ISO 527-2

Charpy impact strength

85 kJ/m²

23°C
ISO 179-1/1eU

AKROMID® B3 GF 40 8 L natural (7817) is a 40% glass fibre reinforced, heat stabilised and food-approved polyamide-blend with a reduced density compared to standard PA6 GF 40

Typical applications

Technical components that are in contact with food, where a weight and cost reduction is required

Regulatory



Mechanical Properties

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

d.a.m. 12000 MPa
conditioned 9000 MPa

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

d.a.m. 175 MPa
conditioned 115 MPa

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

d.a.m. 3,1 %
conditioned 4,3 %

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

d.a.m. 85 kJ/m²

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

d.a.m. 18,5 kJ/m²



Thermal Properties

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)

1,37 g/cm³

Humidity absorption (70°C, 62% r.H. | ISO 1110)

1,1-1,3 %

Molding shrinkage (flow | ISO 294-4)

0,3-0,5 %

Molding shrinkage (transverse | ISO 294-4)

0,8-1,0 %



Rheological Properties

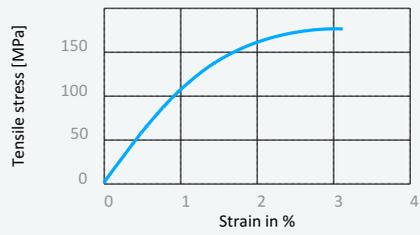
MVR (275°C/5kg | ISO 1133)

8 cm³/10min

Disclaimer:

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Stress strain chart at 23°C



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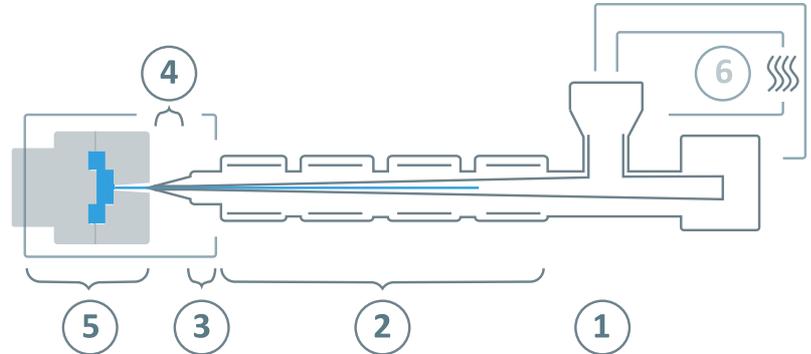
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Processing information

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	220 - 290°C
③	Nozzle temperature	240 - 300°C
④	Melt temperature	240 - 290°C
⑤	Mold temperature	70 - 100°C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	5 - 15 m/min

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