

PA6 – Polyamide 6 PA6 GF20

AKROMID® B3 GF 20 1 natural (2462)

Tensile modulus

6800 MPa

 1 mm/min
 ISO 527-2

Stress at break

150 MPa

 5 mm/min
 ISO 527-2

Charpy impact strength

73 kJ/m²

 23°C
 ISO 179-1/1eU

AKROMID® B3 GF 20 1 natural (2462) is a 20% glass fibre reinforced, heat stabilised polyamide 6 with medium stiffness and strength and light inherent color, UL listed.

Typical applications

Mainly components in mechanical engineering and in the automotive industry

Regulatory



Mechanical Properties

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

d.a.m.

6800 MPa

conditioned

4200 MPa

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

d.a.m.

150 MPa

conditioned

85 MPa

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

d.a.m.

3,5 %

conditioned

7,5 %

Flexural modulus (2 mm/min | ISO 178)

d.a.m.

6100 MPa

Flexural strength (2 mm/min | ISO 178)

d.a.m.

230 MPa

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

d.a.m.

73 kJ/m²

conditioned

88 kJ/m²

Charpy impact strength (-30°C | ISO 179-1/1eU)

d.a.m.

65 kJ/m²

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

d.a.m.

9 kJ/m²

conditioned

14 kJ/m²

Charpy notched impact strength (-30°C | ISO 179-1/1eA)

d.a.m.

8 kJ/m²

Ball indentation hardness (961N/30s | ISO 2039-1)

d.a.m.

200 MPa



Thermal Properties

Temperature of deflection under load HDT/A (1,8 MPa | ISO 75)

210 °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

Temperature index for 50% loss of tensile strength after 5.000h 160 - 175 °C (5.000 h | IEC 60216)

Temperature index for 50% loss of tensile strength after 20.000h (20.000 Std. | IEC 60216)

130 - 150 °C

Disclaimer:

All specifications and information given on this website are based on our current knowledge and experience. A legally binding promise of certain characteristics or suitability for a concrete individual case cannot be derived from this information. The information supplied here is not intended to release processors and users from the responsibility of carrying out their own tests and inspections in each concrete individual case. AKRO®, AKROMID®, AKROLEN®, AKROLOY®, AKROTEK®, ICX® and PRECITE® are registered trademarks of the Feddersen Group.

**Flammability**

Burning rate (UL 94)

0,8mm Wall thickness

HB Class

GWFI (IEC 60695-2-12)

1,6mm Wall thickness

650 °C

Burning rate (<100 mm/min) (> 1 mm Thickness | FMVSS 302)

+

**General properties**

Density (23°C | ISO 1183)

1,27 g/cm³

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

2,4 - 2,7 %

Water absorption 23°C saturated (23°C, saturated | ISO 62)

7,4 - 7,7 %

Molding shrinkage (flow | ISO 294-4)

0,2 %

Molding shrinkage (transverse | ISO 294-4)

0,8 %

**Electrical Properties**

Volume resistivity (IEC 60093)

d.a.m.

1,0E+13 Ohm x cm

conditioned

1,0E+10 Ohm x cm

Surface resistivity (acc. to IEC 60093)

d.a.m.

1,0E+12 Ohm

conditioned

1,0E+10 Ohm

Comparative tracking index (Test liquid A | IEC 60112)

600 V

Disclaimer:

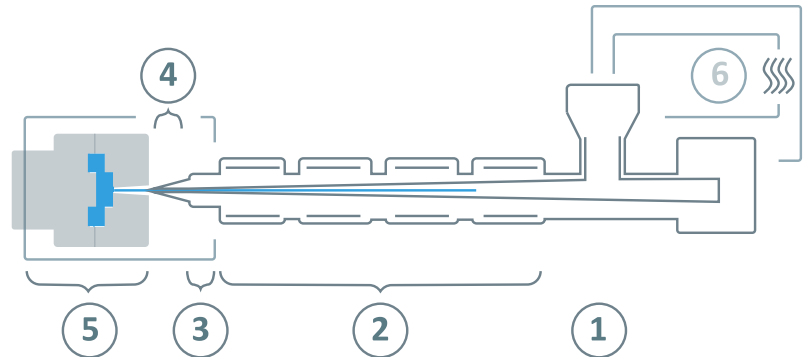
All specifications and information given on this website are based on our current knowledge and experience. A legally binding promise of certain characteristics or suitability for a concrete individual case cannot be derived from this information. The information supplied here is not intended to release processors and users from the responsibility of carrying out their own tests and inspections in each concrete individual case. AKRO®, AKROMID®, AKROLEN®, AKROLOY®, AKROTEK®, ICX® and PRECITE® are registered trademarks of the Feddersen Group.

PA6 – Polyamide 6 PA6 GF20

AKROMID® B3 GF 20 1 natural (2462)

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

Disclaimer:

All specifications and information given on this website are based on our current knowledge and experience. A legally binding promise of certain characteristics or suitability for a concrete individual case cannot be derived from this information. The information supplied here is not intended to release processors and users from the responsibility of carrying out their own tests and inspections in each concrete individual case. AKRO®, AKROMID®, AKROLEN®, AKROLOY®, AKROTEK®, ICX® and PRECITE® are registered trademarks of the Feddersen Group.