

AKROMID®

B3 GF 15 1 black (2482)

PA6 GF15

AKROMID® B3 GF 15 1 black (2482) is a 15% glass fibre reinforced, heat stabilised polyamide 6 with medium stiffness and strength.

Features

heat stabilised 130

Properties

Modulus	Strength	Impact
6.300 MPa	120 MPa	45 kJ/m ²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min d.a.m.	6300 MPa
	1 mm/min conditioned	3300 MPa
Tensile stress at break ISO 527-2	5 mm/min d.a.m.	120 MPa
	5 mm/min conditioned	70 MPa
Tensile strain at break ISO 527-2	5 mm/min d.a.m.	3 %
	5 mm/min conditioned	10 %
Flexural modulus ISO 178	2 mm/min d.a.m.	5700 MPa
	2 mm/min conditioned	3200 MPa
Flexural strength ISO 178	2 mm/min d.a.m.	200 MPa
	2 mm/min conditioned	120 MPa
Flexural strain at break ISO 178	2 mm/min d.a.m.	5 %
	2 mm/min conditioned	15 %
Charpy impact strength ISO 179-1/1eU	23°C d.a.m.	45 kJ/m²
	23°C conditioned	95 kJ/m²
	-30°C d.a.m.	43 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

6 kJ/m²

23°C | conditioned

9 kJ/m²

-30°C | d.a.m.

5 kJ/m²

Ball indentation hardness

ISO 2039-1

961N/30s | d.a.m.

180 MPa

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

205 °C

Temperature of deflection under load HDT/B

ISO 75

0,45 MPa

220 °C

Melting temperature

ISO 11357-3

DSC, 10K/min

220 °C

Temperature index for 50% loss of tensile strength

IEC 60216

5.000 h

160 - 175 °C

20.000 h

130 - 150 °C

Flammability

Flammability

UL 94

0,8 mm Wall thickness

HB Class

GWFI

IEC 60695-2-12

1,6 mm Wall thickness

650 °C

Burning rate (<100 mm/min)

FMVSS 302

> 1 mm Thickness

+

General Properties

Density

ISO 1183

23°C

1,23 g/cm³

Humidity absorption

ISO 1110

70°C, 62% r.H.

2,6 - 2,9 %

Water absorption

ISO 62

23°C, saturated

7,7 - 8,3 %

Molding shrinkage

ISO 294-4

flow

0,2 - 0,4 %

transverse

0,6 - 0,8 %

Electrical Properties

Volume resistivity

IEC 62631-3-1

d.a.m.

$10^{13} \Omega \times \text{cm}$

conditioned

$10^{10} \Omega \times \text{cm}$

Surface resistivity

IEC 62631-3-2

d.a.m.

$10^{12} \Omega$

conditioned

$10^{10} \Omega$

Comparative tracking index

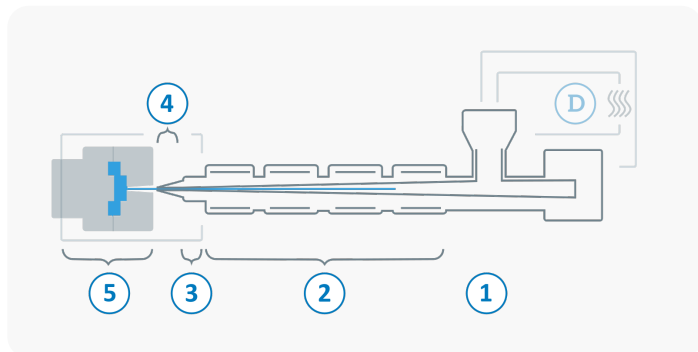
IEC 60112

Test liquid A

600 V

Processing

The values mentioned are recommendations. We only recommend desiccant / dry air dryers or vacuum dryers. Too long a drying time and the resulting residual moisture content below the lower limit can lead to filling problems and surface defects. The specified drying time refers to closed and undamaged bagged material. When processing from previously opened bags or from octabins with polyolefin inliners, a longer drying time may be necessary. It is recommended to check the residual moisture content after the drying process.



D	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