

AKROMID®

NEXT B28 GM 15/15 1 FR black (8750BMBCI)

PA6 (GF15+GB15) FR(40)

AKROMID® B28 GM 15/15 1 FR black (8750BMBCI) is a flame retardant PA6, reinforced with 15% glass fibres and 15% glass beads. The flame retardant system is free of halogens, red phosphorus, PFAS and melamine. Due to its good flowability, it is characterised by easy processability as well as good surface properties. The product is suitable for enclosure applications in the E&E industry due to its low warpage, high stiffness and strength. This grade is excellent for laser marking. The material is certified according to ISCC PLUS. 90 % of the fossil raw materials required for manufacturing this product were replaced by sustainable biomass-balanced PA and FR (Allocation factor).

Features

flame retardant laser markable surface modified
recycled content low warpage easy flow E&E

Regulatory



Properties

Modulus

8.400 MPa

Strength

105 MPa

Impact

45 kJ/m²

Sustainability

Allocation factor

only valid for ISCC PLUS/REDcert² certified products

90 %

Recycled content

15 %

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

8400 MPa

1 mm/min | conditioned

5200 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

105 MPa

5 mm/min | conditioned

65 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,7 %

5 mm/min | conditioned

4,5 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

45 kJ/m²

23°C | conditioned

40 kJ/m²

-30°C | d.a.m.

40 kJ/m²

-30°C | conditioned

35 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

7 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

200 °C

Temperature of deflection under load HDT/B

ISO 75

0,45 MPa

217 °C

Temperature of deflection under load HDT/C

ISO 75

8 MPa

102 °C

Melting temperature

ISO 11357-3

DSC, 10K/min

220 °C

Flammability

Flammability

UL 94

0,8 mm Wall thickness

V-0 Class

1,6 mm Wall thickness

V-0 Class

3,2 mm Wall thickness

V-0 Class

GWFI

IEC 60695-2-12

0,8 mm Wall thickness

960 °C

1,6 mm Wall thickness

960 °C

3,2 mm Wall thickness

960 °C

GWIT

IEC 60695-2-13

1,6 mm Wall thickness

775 °C

Burning rate (<100 mm/min)

FMVSS 302

> 1 mm Thickness

+

General Properties

Density

ISO 1183

23°C

1,44 g/cm³

Humidity absorption

ISO 1110

70°C, 62% r.H.

1,4 - 1,6 %

Molding shrinkage

ISO 294-4

flow

0,7 - 0,9 %

transverse

0,8 - 1,0 %

Electrical Properties

Comparative tracking index

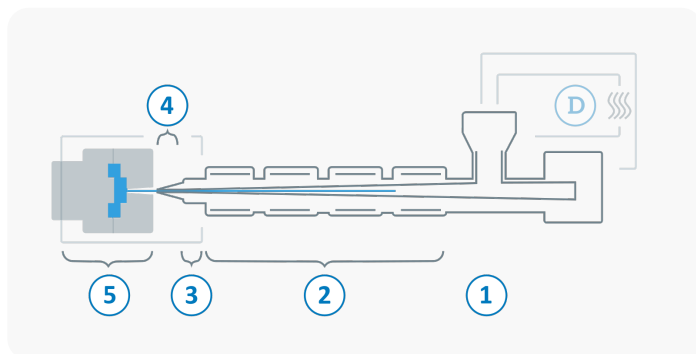
IEC 60112

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	2 - 4 h
	Drying temperature ($\tau \leq -30^{\circ}\text{C}$)	80 °C
	Processing moisture	0,02 - 0,08 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	220 - 280 °C
3	Nozzle temperature	240 - 280 °C
4	Melt temperature	240 - 280 °C
5	Mold temperature	60 - 100 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	30 - 100 bar
	Injection speed	medium
	Screw speed	5 - 10 m/min