

AKROMID®

B3 9 natural (6409)

PA6

AKROMID® B3 9 natural (6409) is an unreinforced polyamide 6 with good flowability and very good demoulding properties. It is suitable for applications in the furniture industry, the sport and leisure as well as the automotive industry. The material has a light inherent color.

Features

Sports & leisure

Properties

Modulus

3.300 MPa

Strength

85 MPa

Impact

Na

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

3300 MPa

Tensile stress at yield

ISO 527-2

50 mm/min | d.a.m.

85 MPa

Tensile strain at yield

ISO 527-2

50 mm/min | d.a.m.

4 %

Tensile strain at break

ISO 527-2

50 mm/min | d.a.m.

17 %

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

60 °C

Temperature of deflection under load HDT/B

ISO 75

0,45 MPa

180 °C

Melting temperature

ISO 11357-3

DSC, 10K/min

220 °C

Flammability

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

General Properties

Density	23°C	1,13 g/cm ³
ISO 1183		
Molding shrinkage	flow	1,0 - 1,2 %
ISO 294-4	transverse	1,1 - 1,3 %

Electrical Properties

Volume resistivity	d.a.m.	10 ¹³ Ω x cm
IEC 62631-3-1		
Surface resistivity	d.a.m.	10 ¹² Ω
IEC 62631-3-2		

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	220 - 270 °C
3	Nozzle temperature	230 - 300 °C
4	Melt temperature	240 - 270 °C
5	Mold temperature	40 - 80 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min

Diagrams

