

AKROMID®

B3 S1 black (7629)

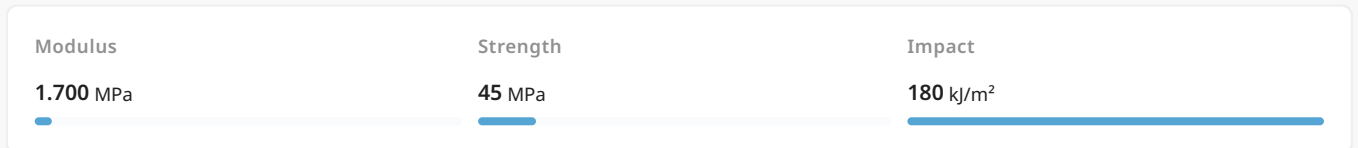
PA6-I

AKROMID® B3 S1 black (7629) is an unreinforced, impact modified Polyamide 6. The material is characterised by a very high impact strength even at low temperatures and therefore perfectly suitable for mountings and dowels in the furniture and construction industry as well as parts for sport and leisure.

Features

impact modified Sports & leisure

Properties



Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min d.a.m.	1700 MPa
	1 mm/min conditioned	535 MPa
Tensile stress at yield ISO 527-2	50 mm/min d.a.m.	45 MPa
	50 mm/min conditioned	30 MPa
Tensile strain at yield ISO 527-2	50 mm/min d.a.m.	4,5 %
Tensile strain at break ISO 527-2	50 mm/min d.a.m.	> 100 %
	50 mm/min conditioned	> 200 %
Flexural modulus ISO 178	2 mm/min d.a.m.	1400 MPa
	2 mm/min conditioned	530 MPa
Flexural strength ISO 178	2 mm/min d.a.m.	56 MPa
	2 mm/min conditioned	25 MPa
Charpy impact strength ISO 179-1/1eU	23°C d.a.m.	no break
	23°C conditioned	no break
	-30°C d.a.m.	no break
	-30°C conditioned	no break

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

85 kJ/m²

23°C | conditioned

> 120 kJ/m²

-30°C | d.a.m.

40 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

52 °C

Melting temperature

ISO 11357-3

DSC, 10K/min

220 °C

Flammability

Flammability

UL 94

1,6 mm Wall thickness

HB Class

Burning rate (<100 mm/min)

FMVSS 302

> 1 mm Thickness

+

General Properties

Density

ISO 1183

23°C

1,07 g/cm³

Humidity absorption

ISO 1110

70°C, 62% r.H.

1,9 - 2,1 %

Molding shrinkage

ISO 294-4

flow

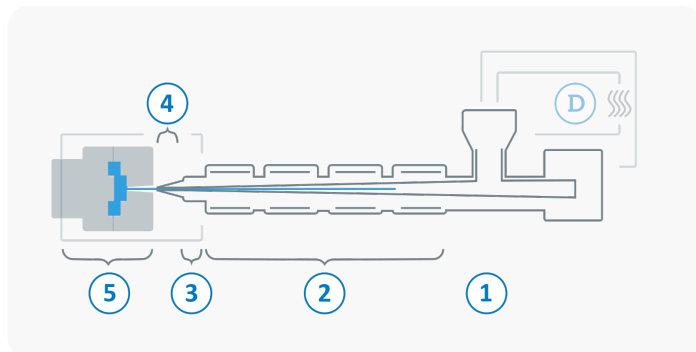
1,0 - 1,2 %

transverse

1,1 - 1,3 %

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

