

AKROMID®

B3 GF 30 9 RM-M black (3099)

PA6+X GF30

AKROMID® B3 GF 30 9 RM-M black (3099) is a 30% glass fibre reinforced and process improved polyamide 6 with high stiffness and strength and limited moisture absorption

Features

reduced moisture process improved

Properties

Modulus

10.500 MPa

Strength

170 MPa

Impact

70 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

10500 MPa

1 mm/min | conditioned

7500 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

170 MPa

5 mm/min | conditioned

115 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,6 %

5 mm/min | conditioned

4,2 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

9600 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

250 MPa

Flexural strain at break

ISO 178

2 mm/min | d.a.m.

3,2 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

70 kJ/m²

23°C | conditioned

70 kJ/m²

-30°C | d.a.m.

65 kJ/m²

-30°C | conditioned

60 kJ/m²

Charpy notched impact strength ISO 179-1/1eA	23°C d.a.m.	12 kJ/m ²
	23°C conditioned	13 kJ/m ²
	-30°C d.a.m.	10 kJ/m ²
	-30°C conditioned	10 kJ/m ²

Ball indentation hardness ISO 2039-1	961N/30s d.a.m.	230 MPa
--	-------------------	---------

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	205 °C
---	---------	--------

Temperature of deflection under load HDT/C ISO 75	8 MPa	160 °C
---	-------	--------

Melting temperature ISO 11357-3	DSC, 10K/min	225 °C
---	--------------	--------

Flammability

Flammability UL 94	0,8 mm Wall thickness	HB Class
------------------------------	-----------------------	----------

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

General Properties

Density ISO 1183	23°C	1,41 g/cm ³
----------------------------	------	------------------------

Humidity absorption ISO 1110	70°C, 62% r.H.	1,6 %
--	----------------	-------

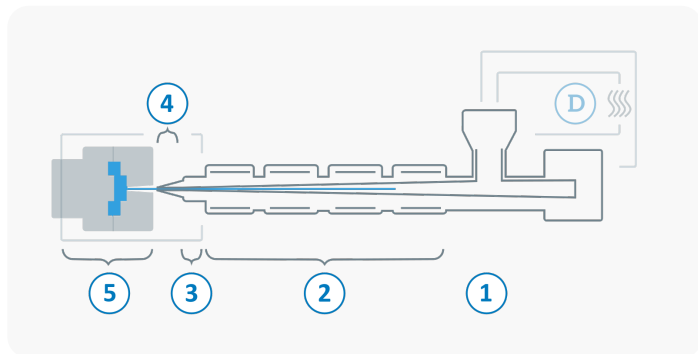
Molding shrinkage ISO 294-4	flow	0,1 - 0,3 %
	transverse	0,5 - 0,7 %

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	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 - 280 °C
3	Nozzle temperature	240 - 290 °C
4	Melt temperature	240 - 280 °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