

AKROMID®

B3 GFM 10/20 1 grey (4561)

PA6 (GF10+MD20)

AKROMID® B3 GFM 10/20 1 grey (4561) is a 10% glass fibre reinforced and 20% mineral filled, heat stabilised Polyamid 6 with good surface and dimensional stability

Features

heat stabilised 130 surface modified low warpage

Properties

Modulus

5.800 MPa

Strength

100 MPa

Impact

50 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

5800 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

100 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3,5 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

5500 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

165 MPa

Flexural strain at break

ISO 178

2 mm/min | d.a.m.

5,6 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

50 kJ/m²

-30°C | d.a.m.

43 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

3,7 kJ/m²

-30°C | d.a.m.

3,3 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	178 °C
Temperature of deflection under load HDT/C ISO 75	8 MPa	55 °C
Melting temperature ISO 11357-3	DSC, 10K/min	222 °C

Flammability

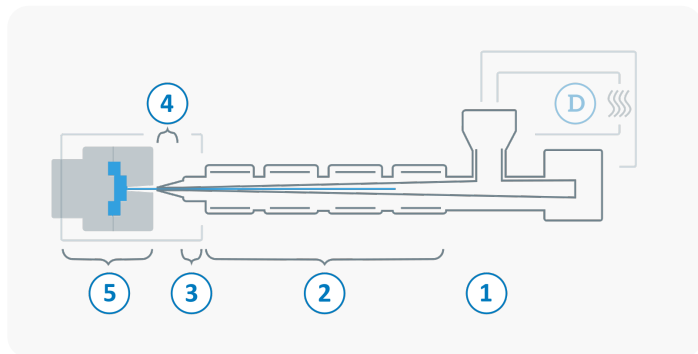
Flammability UL 94	1,6 mm Wall thickness	HB Class
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+

General Properties

Density ISO 1183	23°C	1,38 g/cm³
Molding shrinkage ISO 294-4	flow	0,7 %
	transverse	0,8 %

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