

AKROMID®

A3 GM 25/15 1 black (7003)

PA66 (GF25+GB15)

AKROMID® A3 GM 25/15 1 black (7003) is a 25% glass fiber and 15% glass beads reinforced, heat stabilised PA 6.6. The material impresses with a good surface appearance and low warpage and is therefore perfectly suitable for technical demanding components in the mechanical engineering and automotive industry.

Features

heat stabilised 130 low warpage

Properties

Modulus

10.000 MPa

Strength

180 MPa

Impact

70 kJ/m²

Sustainability

Recycled content 15 %

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

10000 MPa

1 mm/min | conditioned

7000 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

180 MPa

5 mm/min | conditioned

110 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3 %

5 mm/min | conditioned

8 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

10200 MPa

2 mm/min | conditioned

7500 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

275 MPa

2 mm/min | conditioned

205 MPa

Flexural strain at break	2 mm/min d.a.m.	3,4 %
ISO 178	2 mm/min conditioned	5 %
Charpy impact strength	23°C d.a.m.	70 kJ/m²
ISO 179-1/1eU	23°C conditioned	80 kJ/m²
	-30°C d.a.m.	57 kJ/m²
Charpy notched impact strength	23°C d.a.m.	10 kJ/m²
ISO 179-1/1eA	-30°C d.a.m.	8 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A	1,8 MPa	255 °C
ISO 75		
Melting temperature	DSC, 10K/min	262 °C
ISO 11357-3		

Flammability

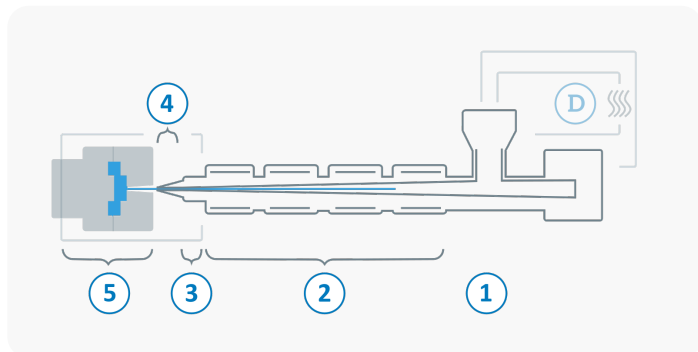
Flammability	1,6 mm Wall thickness	HB Class
UL 94		
Burning rate (<100 mm/min)	> 1 mm Thickness	+
FMVSS 302		

General Properties

Density	23°C	1,46 g/cm³
ISO 1183		
Molding shrinkage	flow	0,2 - 0,4 %
ISO 294-4	transverse	0,7 - 0,9 %

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	260 - 300 °C
3	Nozzle temperature	270 - 310 °C
4	Melt temperature	280 - 300 °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