

AKROMID®

C28 GFM 10/20 5 XTC black (7367)

PA66+PA6 (GF10+MD20)

AKROMID® C28 GFM 10/20 5 XTC black (7367) is a 10% glass fiber and 20% mineral reinforced, easy flowing polyamide 6.6/6 blend. It is characterised by excellent temperature resistance as well as a very high surface quality. Furthermore, the material impresses with low warpage, resulting in high dimensional stability. It is therefore perfectly suitable for parts in industrial engineering and in the automotive industry, e.g. under the hood, which are exposed to high temperatures.

Features

heat stabilised 230 surface modified low warpage easy flow

Properties

Modulus

9.500 MPa

Strength

120 MPa

Impact

40 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

9500 MPa

1 mm/min | conditioned

6000 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

120 MPa

5 mm/min | conditioned

80 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,5 %

5 mm/min | conditioned

7 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

8500 MPa

2 mm/min | conditioned

4300 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

180 MPa

2 mm/min | conditioned

110 MPa

Flexural strain at break

ISO 178

2 mm/min | d.a.m.

3 %

2 mm/min | conditioned

8 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

40 kJ/m²

23°C | conditioned

60 kJ/m²

Charpy notched impact strength	23°C d.a.m.	4 kJ/m²
ISO 179-1/1eA	23°C conditioned	6 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A	1,8 MPa	225 °C
ISO 75		

Melting temperature	DSC, 10K/min	245 °C
ISO 11357-3		

Coefficient of linear thermal expansion	23°C to 80°C parallel	0,3 10⁻⁴/K
ISO 11359-1/2	23°C to 80°C transverse	0,98 10⁻⁴/K

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	1,38 g/cm³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	1,7 %
ISO 1110		

Molding shrinkage	flow	0,4 - 0,6 %
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 - 300 °C
4	Melt temperature	270 - 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