

AKROMID®

A3 GF 35 2 black (21010)

PA66 GF35

AKROMID® A3 GF 35 2 black (21010) is a 35% glass fibre reinforced, UV-stabilised polyamide 6.6 with high stiffness and strength

Features

heat stabilised 130 UV-stabilised

Properties

Modulus

12.000 MPa

Strength

185 MPa

Impact

50 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

12000 MPa

1 mm/min | conditioned

8400 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

185 MPa

5 mm/min | conditioned

130 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2 %

5 mm/min | conditioned

3,5 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

50 kJ/m²

23°C | conditioned

65 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

8 kJ/m²

23°C | conditioned

10 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

255 °C

Temperature of deflection under load HDT/B

ISO 75

0,45 MPa

260 °C

Temperature of deflection under load HDT/C	8 MPa	220 °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	1,4 g/cm ³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	1,8 - 2,0 %
ISO 1110		

Water absorption	23°C, saturated	4,7 - 5,3 %
ISO 62		

Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,6 - 0,8 %

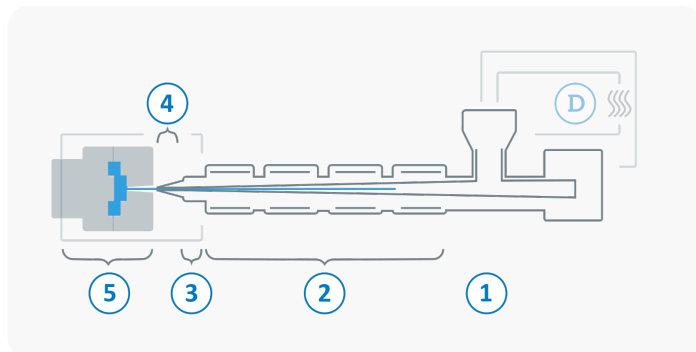
Electrical Properties

Surface resistivity	d.a.m.	10 ¹² Ω
IEC 62631-3-2	conditioned	10 ¹⁰ Ω

Comparative tracking index	Test liquid A	600 V
IEC 60112		

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

Diagrams

