

AKROMID®

A3 GF 35 2 black (7226)

PA66 GF35

AKROMID® A3 GF 35 2 black (7226) is a 35% glass fiber reinforced polyamide 6.6. It is characterised by high stiffness and strength. Furthermore, the material is heat and UV-stabilised and therefore perfectly suitable for technical parts in industrial engineering and in the automotive industry.

Features

UV-stabilised

Properties

Modulus

11.500 MPa

Strength

215 MPa

Impact

90 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

11500 MPa

1 mm/min | conditioned

8400 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

215 MPa

5 mm/min | conditioned

145 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3 %

5 mm/min | conditioned

5 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

90 kJ/m²

23°C | conditioned

100 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

15 kJ/m²

23°C | conditioned

19 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 ISO 75	8 MPa	220 °C
Melting temperature ISO 11357-3	DSC, 10K/min	262 °C

Flammability

Flammability UL 94	0,8 mm Wall thickness	HB Class
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+

General Properties

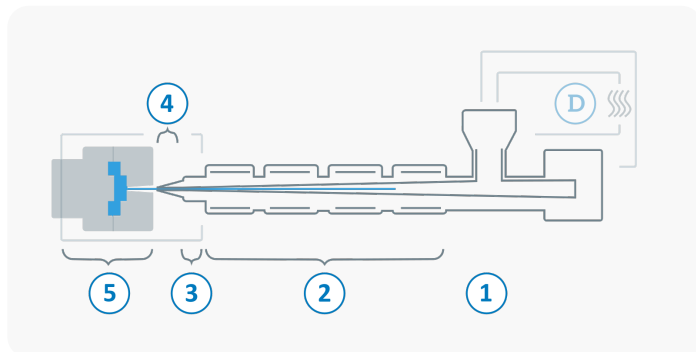
Density ISO 1183	23°C	1,4 g/cm³
Humidity absorption ISO 1110	70°C, 62% r.H.	1,8 - 2,0 %
Water absorption ISO 62	23°C, saturated	4,7 - 5,3 %
Molding shrinkage ISO 294-4	flow transverse	0,1 - 0,3 % 0,6 - 0,8 %

Electrical Properties

Volume resistivity IEC 62631-3-1	d.a.m. conditioned	10¹³ Ω x cm 10¹⁰ Ω x cm
Surface resistivity IEC 62631-3-2	d.a.m. conditioned	10¹² Ω 10¹⁰ Ω
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	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

