

AKROMID® PRELIMINARY

T9 GF 30 1 black (8315)

PPA GF30

AKROMID® T9 GF 30 1 black (8315) is a 30% glass fibre reinforced and heat stabilization polyphthalamide with high rigidity and strength, as well as high temperature and chemical resistance. The compound is based on PA9T and has lower moisture uptake than conventional PA6T variants. This leads to a significantly higher consistency of the glass transition temperature and higher strength at elevated temperatures especially in conditioned state.

Properties

Modulus

9.500 MPa

Strength

190 MPa

Impact

75 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

9500 MPa

1 mm/min | conditioned

9400 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

190 MPa

5 mm/min | conditioned

155 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3 %

5 mm/min | conditioned

2 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

75 kJ/m²

-30°C | d.a.m.

65 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

10 kJ/m²

-30°C | d.a.m.

9 kJ/m²

Thermal Properties

Melting temperature

ISO 11357-3

DSC, 10K/min

305 °C

Flammability

Flammability	1,6 mm Wall thickness	HB Class
UL 94		

General Properties

Density	23°C	1,38 g/cm³
ISO 1183		

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

Molding shrinkage	flow	0,2 - 0,4 %
ISO 294-4	transverse	0,7 - 0,9 %

Electrical Properties

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 ($\tau \leq -30^{\circ}\text{C}$)	120 °C
	Processing moisture	<0,05 %
1	Feed section	60 - 90 °C
2	Temperature Zone 1 - Zone 4	300 - 340 °C
3	Nozzle temperature	310 - 350 °C
4	Melt temperature	310 - 340 °C
5	Mold temperature	>135 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min