

AKROMID® PRELIMINARY

T9 GF 30 grey (8134)

PPA GF30

AKROMID® T9 GF 30 grey (8134) is a 30% glass fiber reinforced polyphthalamide colored in grey, similar to RAL 7047. Not only is it characterised by very high stiffness and strength, but also by its high temperature and chemical resistance. Based on PA9T, the material has a lower moisture absorption and a Tg which is more constant compared to conventional PA6T variants. Therefore, it is perfectly suitable for parts with tight dimensional tolerances which are exposed to high mechanical loads.

Features

heat stabilised 160 hydrolysis / chemically stabilised reduced moisture E&E

Properties

Modulus

10.000 MPa

Strength

190 MPa

Impact

70 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

10000 MPa

1 mm/min | conditioned

9500 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

190 MPa

5 mm/min | conditioned

160 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,8 %

5 mm/min | conditioned

2,1 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

70 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

10 kJ/m²

Thermal Properties

Melting temperature

ISO 11357-3

DSC, 10K/min

305 °C

Temperature index for 50% loss of tensile strength	5.000 h	155 °C
IEC 60216	20.000 h	125 °C

Flammability

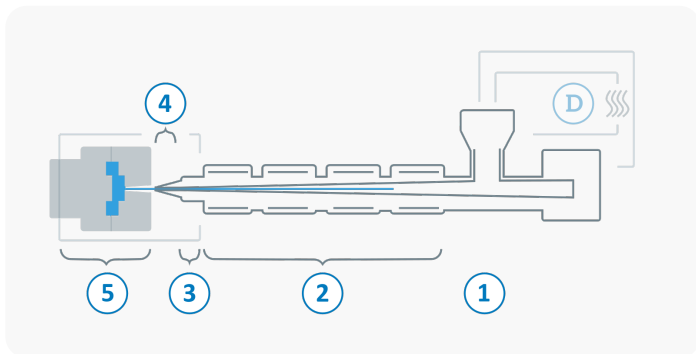
Flammability	1,6 mm Wall thickness	HB Class
UL 94		

General Properties

Density	23°C	1,38 g/cm³
ISO 1183		
Humidity absorption	70°C, 62% r.H.	0,8 - 1,0 %
ISO 1110		

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