

AKROMID® PRELIMINARY

T5 GF 30 6 black (8006)

PPA GF30

AKROMID® T5 GF 30 black (8006) is a 30% glass fibre reinforced polyphthalamide with high rigidity and strength, as well as high temperature and chemical resistance

Features

heat stabilised 160

Properties

Modulus

11.800 MPa

Strength

200 MPa

Impact

45 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

11800 MPa

1 mm/min | conditioned

11800 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

200 MPa

5 mm/min | conditioned

185 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2 %

5 mm/min | conditioned

1,9 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

11000 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

280 MPa

Flexural strain at break

ISO 178

2 mm/min | d.a.m.

2,6 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

45 kJ/m²

23°C | conditioned

45 kJ/m²

-30°C | d.a.m.

40 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

9 kJ/m²

23°C | conditioned

9 kJ/m²

-30°C | d.a.m.

9 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

270 °C

Temperature of deflection under load HDT/C

ISO 75

8 MPa

145 °C

Melting temperature

ISO 11357-3

DSC, 10K/min

325 °C

General Properties

Density

ISO 1183

23°C

1,4 g/cm³

Molding shrinkage

ISO 294-4

flow

0,2 - 0,4 %

transverse

0,6 - 0,8 %

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 $^{\circ}\text{C}$
	Processing moisture	0,02 - 0,1 %
1	Feed section	60 - 90 $^{\circ}\text{C}$
2	Temperature Zone 1 - Zone 4	320 - 350 $^{\circ}\text{C}$
3	Nozzle temperature	330 - 350 $^{\circ}\text{C}$
4	Melt temperature	330 - 350 $^{\circ}\text{C}$
5	Mold temperature	120 - 160 $^{\circ}\text{C}$
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min

Diagrams

