

AKROMID® PRELIMINARY

T5 GF 50 6 black (8000)

PPA GF50

Standard Grade with good surface quality. AKROMID® T5 GF 50 6 black (8000) is a 50% glass fibre reinforced polyphthalamide with anorganic heat stabilization, very high rigidity and strength, as well as high temperature and chemical resistance. This aromatic PPA keeps mechanical performance even at elevated temperatures or moisture pic-up

Features

heat stabilised 160

Properties

Modulus

18.500 MPa

Strength

260 MPa

Impact

65 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

18500 MPa

1 mm/min | conditioned

18500 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

260 MPa

5 mm/min | conditioned

260 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

1,9 %

5 mm/min | conditioned

1,9 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

65 kJ/m²

23°C | conditioned

58 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

13 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/C

ISO 75

8 MPa

230 °C

Glass transition temperature	DSC, 2nd heating	135 °C
ISO 11357-2		

Melting temperature	DSC, 10K/min	325 °C
ISO 11357-3		

Flammability

Flammability	0,8 mm Wall thickness	HB Class
UL 94	1,6 mm Wall thickness	HB Class
	3,2 mm Wall thickness	HB Class

General Properties

Density	23°C	1,65 g/cm³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	0,7 - 0,9 %
ISO 1110		

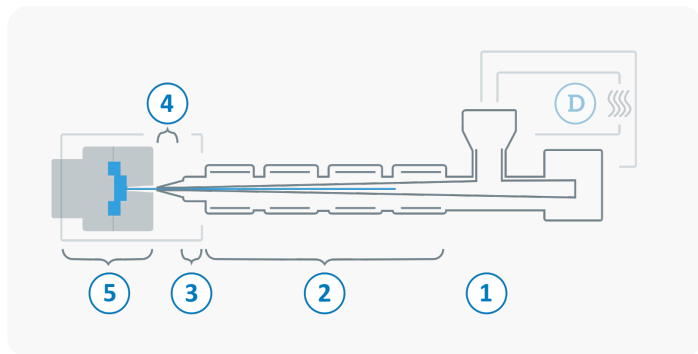
Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,4 - 0,6 %

Rheological Properties

Flowability	2 mm Thickness	400 mm
AKRO		

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