

AKROMID®

T5 GF 35 4 black (7692)

PPA GF35

AKROMID® T5 GF 35 4 black (7692) is a 35% glass fibre reinforced polyphthalamide with inorganic heat stabilization, very high rigidity and strength, designed for hydrolysis resistance. This aromatic PPA keeps mechanical performance even at elevated temperatures or moisture pic-up

Features

hydrolysis / chemically stabilised

Properties

Modulus

13.500 MPa

Strength

220 MPa

Impact

70 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

13500 MPa

1 mm/min | conditioned

13000 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

220 MPa

5 mm/min | conditioned

215 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,4 %

5 mm/min | conditioned

2,3 %

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.

11 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

280 °C

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

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

Flammability

Flammability	1,6 mm Wall thickness	HB Class
UL 94		

General Properties

Density	23°C	1,45 g/cm³
ISO 1183		

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

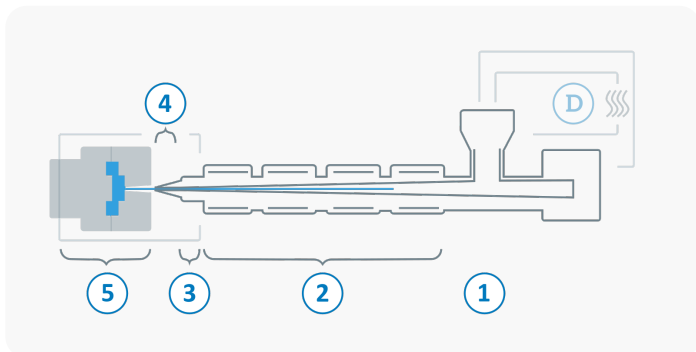
Molding shrinkage	flow	0,15 - 0,35 %
ISO 294-4	transverse	0,55 - 0,75 %

Electrical Properties

Surface resistivity	d.a.m.	10¹² Ω
IEC 62631-3-2		

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

