

AKROMID® PRELIMINARY T9 GF 50 1 black (7601)

PPA GF50

AKROMID® T9 GF 50 1 black (7601) is a 50% glass fibre reinforced, heat stabilized partially aromatic polyphthalamide with very high stiffness 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.

heat stabilised 130 electrically neutral reduced moisture metal substitution Properties Modulus Strength Impact 17.000 MPa 250 MPa 95 kJ/m²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min d.a.m.	17000 MPa
Tensile stress at break ISO 527-2	5 mm/min d.a.m.	250 MPa
Tensile strain at break ISO 527-2	5 mm/min d.a.m.	2,5 %
Charpy impact strength	23°C d.a.m.	95 kJ/m²
ISO 179-1/1eU	-30°C d.a.m.	80 kJ/m²
Charpy notched impact strength	23°C d.a.m.	16 kJ/m²
ISO 179-1/1eA	-30°C d.a.m.	14 kJ/m²

Thermal Properties

Melting temperature ISO 11357-3	DSC, 10K/min	300 °C



Flammability

Flammability	1.6 mm Wall thickness	HB Class
UL 94	1,0 Hill Wall thekitess	TID Class

General Properties

Density ISO 1183	23°C	1,55 g/cm³
Humidity absorption ISO 1110	70°C, 62% r.H.	0,1 - 0,3 %
Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,6 - 0,8 %

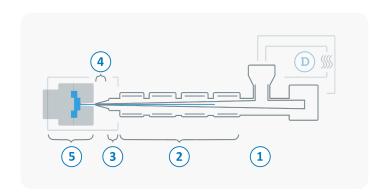
Electrical Properties

Comparative tracking index IEC 60112	Test liquid A	600 V



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 (τ <= -30°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
\ominus	Holding pressure, spec.	300 - 800 bar
	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min



Diagrams

