

AKROMID®

A3 CF 30 5 black (7488)

PA66 CF30

AKROMID® A3 CF 30 5 black (7488) is a 30% carbon fibre reinforced, high temperature stabilised polyamide 6.6 with elevated mechanical properties and good sliding properties.

Features

heat stabilised 160

Properties

Modulus	Strength	Impact
26.000 MPa	285 MPa	90 kJ/m ²

Mechanical Properties

Tensile modulus	1 mm/min d.a.m.	26000 MPa
ISO 527-2	1 mm/min conditioned	17500 MPa
Tensile stress at break	5 mm/min d.a.m.	285 MPa
ISO 527-2	5 mm/min conditioned	200 MPa
Tensile strain at break	5 mm/min d.a.m.	2 %
ISO 527-2	5 mm/min conditioned	3,5 %
Flexural modulus	2 mm/min d.a.m.	23000 MPa
ISO 178	2 mm/min conditioned	17000 MPa
Flexural strength	2 mm/min d.a.m.	400 MPa
ISO 178	2 mm/min conditioned	300 MPa
Charpy impact strength	23°C d.a.m.	90 kJ/m ²
ISO 179-1/1eU	23°C conditioned	110 kJ/m ²
Charpy notched impact strength	23°C d.a.m.	10 kJ/m ²
ISO 179-1/1eA	23°C conditioned	13 kJ/m ²
	-40°C d.a.m.	8 kJ/m ²

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	254 °C
Melting temperature ISO 11357-3	DSC, 10K/min	260 °C

Flammability

Flammability UL 94	1,6 mm Wall thickness	HB Class
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+

General Properties

Density ISO 1183	23°C	1,26 g/cm ³
Humidity absorption ISO 1110	70°C, 62% r.H.	1,8 %
Molding shrinkage ISO 294-4	flow transverse	0,1 - 0,3 % 0,5 - 0,7 %

Electrical Properties

Volume resistivity IEC 62631-3-1	d.a.m.	10 ⁴ Ω x cm
Surface resistivity IEC 62631-3-2	d.a.m.	10 ⁴ Ω

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 ($\tau \leq -30^{\circ}\text{C}$)	80 °C
	Processing moisture	0,02 - 0,1 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	260 - 310 °C
3	Nozzle temperature	270 - 310 °C
4	Melt temperature	280 - 310 °C
5	Mold temperature	80 - 140 °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

