

AKROMID®

C3 GF 30 5 XTC natural (4499)

PA66 + PA6 GF 30

AKROMID® C3 GF 30 5 XTC natural (4499) is a 30% glass fibre reinforced, high temperature stabilised polyamide 6.6/6 - Blend with high stiffness and strength and extra high temperature tolerance.

Features

heat stabilised 230

Properties

Modulus

9.500 MPa

Strength

185 MPa

Impact

95 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

9500 MPa

1 mm/min | conditioned

6000 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

185 MPa

5 mm/min | conditioned

115 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3,5 %

5 mm/min | conditioned

6,5 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

95 kJ/m²

23°C | conditioned

90 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

13 kJ/m²

23°C | conditioned

13 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

230 °C

Temperature of deflection under load HDT/B

ISO 75

0,45 MPa

250 °C

Melting temperature	DSC, 10K/min	245 °C
ISO 11357-3		

Coefficient of linear thermal expansion	23°C to 80°C parallel	0,15 10⁻⁴/K
ISO 11359-1/2	23°C to 80°C transverse	1,12 10⁻⁴/K

Flammability

Flammability	1,6 mm Wall thickness	HB Class
UL 94		

Burning rate (<100 mm/min)	> 1 mm Thickness	+
FMVSS 302		

General Properties

Density	23°C	1,36 g/cm³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	2,0 - 2,2 %
ISO 1110		

Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,6 - 0,8 %

Electrical Properties

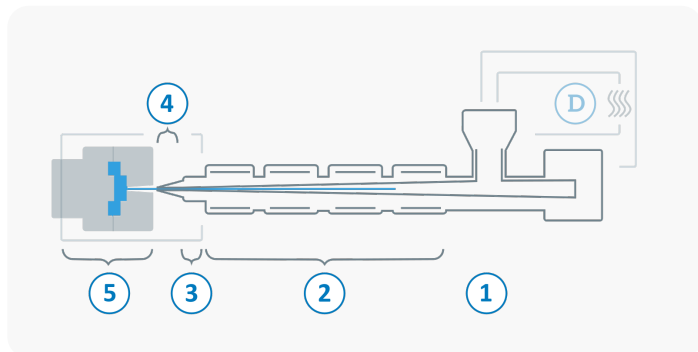
Volume resistivity	d.a.m.	10¹³ Ω x cm
IEC 62631-3-1	conditioned	10¹⁰ Ω x cm

Surface resistivity	d.a.m.	10¹² Ω
IEC 62631-3-2	conditioned	10¹⁰ Ω

Comparative tracking index	Test liquid A	600 V
IEC 60112		

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 - 300 °C
3	Nozzle temperature	270 - 300 °C
4	Melt temperature	270 - 300 °C
5	Mold temperature	80 - 100 °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

