

AKROMID®

C3 GF 30 1 FR white (7630)

PA6+PA66 GF30 FR(40)

AKROMID® C3 GF 30 1 FR white (7630) is a 30 % glass fiber reinforced, flame retardant and heat stabilised PA6/6.6 blend, colored in white similar to RAL 9010. Listed to UL 94 in all-colours, the material is based on a flame retardant system that is free of red phosphorus and halogens. Due to its good flowability, an improved surface quality is achieved. This grade is also suitable E&E applications (e.g. control cabinets) as well as for railroad applications and meets the requirements for public transportation (EN 45545-2 R22/23/24/26 HL3).

Features

heat stabilised 130 electrically neutral flame retardant
easy flow E&E public transportation

Regulatory

EN45545-2



Properties

Modulus

10.600 MPa

Strength

140 MPa

Impact

Na

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

10600 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

140 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,6 %

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

10 kJ/m²

Thermal Properties

RTI electrical

UL 746B

UL	0,4mm Wall thickness	140 °C
UL	0,8mm Wall thickness	150 °C
UL	1,6mm Wall thickness	150 °C
UL	3,2mm Wall thickness	150 °C

RTI impact

UL 746B

UL	0,4mm Wall thickness	120 °C
UL	0,8mm Wall thickness	125 °C
UL	1,6mm Wall thickness	125 °C
UL	3,2mm Wall thickness	125 °C

RTI strength

UL 746B

UL	0,4mm Wall thickness	135 °C
UL	0,8mm Wall thickness	140 °C
UL	1,6mm Wall thickness	140 °C
UL	3,2mm Wall thickness	140 °C

Melting temperature

ISO 11357-3

DSC, 10K/min	262 °C
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Flammability

Flammability

UL 94

UL	0,4 mm Wall thickness	V-0 Class
UL	0,8 mm Wall thickness	V-0 Class
UL	1,6 mm Wall thickness	V-0 Class
UL	3,2 mm Wall thickness	V-0 Class

GWFI

IEC 60695-2-12

UL	0,4 mm Wall thickness	960 °C
UL	0,8 mm Wall thickness	960 °C
UL	1,6 mm Wall thickness	960 °C
UL	3,2 mm Wall thickness	960 °C

GWIT

IEC 60695-2-13

UL	0,4 mm Wall thickness	725 °C
UL	0,8 mm Wall thickness	725 °C
UL	1,6 mm Wall thickness	725 °C
UL	3,2 mm Wall thickness	775 °C

HWI

UL 746A

UL	0,4 mm Wall thickness	0 PLC
UL	0,8 mm Wall thickness	0 PLC
UL	1,6 mm Wall thickness	0 PLC
UL	3,2 mm Wall thickness	0 PLC

HAI

UL 746A

UL	0,4 mm Wall thickness	0 PLC
UL	0,8 mm Wall thickness	0 PLC
UL	1,6 mm Wall thickness	0 PLC
UL	3,2 mm Wall thickness	0 PLC

Protection Train

EN 45545-2

R22/R23/R24/R26 HL3

General Properties

Density

ISO 1183

23°C

1,47 g/cm³

Electrical Properties

Volume resistivity

IEC 62631-3-1

UL d.a.m.

10¹² Ω x cm

Comparative tracking index

IEC 60112

Test liquid A

600 V

Comparative tracking index

ASTM D3638

UL

0 PLC

Dielectric strength

IEC 60243

UL 1 mm

24,6 kV/mm

Inclined-Plane Tracking, IPT

ASTM D2303-13

UL

1 kV

High voltage arc tracking rate (HVTR)

UL 746A

UL

1 PLC

High Volt, Low Current Arc Resistance

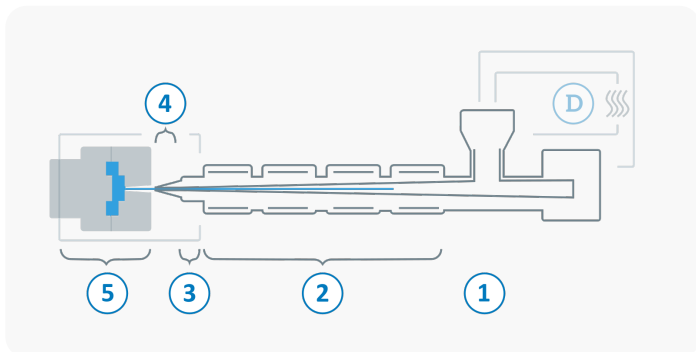
ASTM D495

UL

6 PLC

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	2 - 4 h
	Drying temperature ($\tau \leq -30^{\circ}\text{C}$)	80 °C
	Processing moisture	0,02 - 0,08 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	260 - 290 °C
3	Nozzle temperature	260 - 300 °C
4	Melt temperature	270 - 290 °C
5	Mold temperature	60 - 100 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	30 - 100 bar
	Injection speed	medium
	Screw speed	5 - 10 m/min