

AKROMID®

B3 GF 30 FR red (8914)

PA6 GF30 FR(40)

AKROMID® B3 GF 30 FR red (8914) is a 30 % glass fiber reinforced, flame-retardant PA6 colored in red similar to NCS 2570. Listed to UL 94 in all colors, the material is based on a flame retardant system that is free of red phosphorus, halogens, melamine and PFAS. An improved surface quality is achieved through good flowability. This grade is particularly suitable for applications with high strength requirements in the automotive and E&E markets.

Features

heat stabilised 130 flame retardant surface modified
process improved E&E E-Mobility

Regulatory



Properties

Modulus

11.200 MPa

Strength

140 MPa

Impact

65 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

11200 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.

2,8 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

65 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

210 °C

Temperature of deflection under load HDT/B

ISO 75

0,45 MPa

220 °C

Melting temperature	DSC, 10K/min	222 °C
ISO 11357-3		

Ball pressure test		> 160 °C
IEC 60695-10-2		

Flammability

Flammability	UL 0,8 mm Wall thickness	V-0 Class
UL 94	UL 1,6 mm Wall thickness	V-0 Class
	UL 3,2 mm Wall thickness	V-0 Class

Burning rate 5V	1,6 mm Wall thickness	5VA Class
UL 94	3,2 mm Wall thickness	5VA Class

GWFI	UL 0,4 mm Wall thickness	960 °C
IEC 60695-2-12	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	UL 0,4 mm Wall thickness	800 °C
IEC 60695-2-13	UL 0,8 mm Wall thickness	800 °C
	UL 1,6 mm Wall thickness	900 °C
	UL 3,2 mm Wall thickness	775 °C

HWI	UL 0,4 mm Wall thickness	0 PLC
UL 746A	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 0,4 mm Wall thickness	0 PLC
UL 746A	UL 0,8 mm Wall thickness	0 PLC
	UL 1,6 mm Wall thickness	0 PLC
	UL 3,2 mm Wall thickness	0 PLC

General Properties

Density	23°C	1,43 g/cm³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	1,4 - 1,6 %
ISO 1110		

Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,5 - 0,7 %

Electrical Properties

Volume resistivity	UL d.a.m.	$10^{14} \Omega \times \text{cm}$
IEC 62631-3-1		

Surface resistivity	d.a.m.	$10^{12} \Omega$
IEC 62631-3-2		

Comparative tracking index	Test liquid A	600 V
IEC 60112		

Comparative tracking index	UL	0 PLC
ASTM D3638		

Dielectric strength	UL 3 mm	9 kV/mm
IEC 60243		

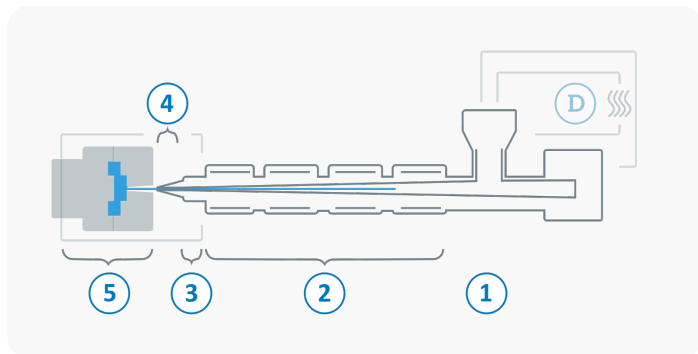
Inclined-Plane Tracking, IPT	UL	1 kV
ASTM D2303-13		

High voltage arc tracking rate (HVTR)	UL	0 PLC
UL 746A		

High Volt, Low Current Arc Resistance	UL	6 PLC
ASTM D495		

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	220 - 280 °C
3	Nozzle temperature	240 - 280 °C
4	Melt temperature	240 - 280 °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