

AKROMID®

A3 GF 60 HU natural (6452)

PA66 GF60

AKROMID® A3 GF 60 HU natural (6452) is a 60% glass fibre reinforced and heat stabilised polyamide 6.6 with very high rigidity and strength and light inherent color

Features

heat stabilised 130

Regulatory



Properties

Modulus

20.500 MPa

Strength

270 MPa

Impact

105 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

20500 MPa

1 mm/min | conditioned

15800 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

270 MPa

5 mm/min | conditioned

190 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,4 %

5 mm/min | conditioned

2,5 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

105 kJ/m²

23°C | conditioned

107 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

20 kJ/m²

23°C | conditioned

22 kJ/m²

UV Exposure and Water Immersion

UL 746C



f2

Thermal Properties

RTI electrical UL 746B	UL 0,4mm Wall thickness	130 °C
	UL 0,8mm Wall thickness	130 °C
	UL 1,6mm Wall thickness	130 °C
	UL 3,2mm Wall thickness	130 °C
RTI impact UL 746B	UL 0,8mm Wall thickness	120 °C
	UL 1,6mm Wall thickness	120 °C
	UL 3,2mm Wall thickness	120 °C
RTI strength UL 746B	UL 0,8mm Wall thickness	130 °C
	UL 1,6mm Wall thickness	130 °C
	UL 3,2mm Wall thickness	130 °C
Melting temperature ISO 11357-3	DSC, 10K/min	262 °C

Flammability

Flammability UL 94	UL 0,8 mm Wall thickness	HB Class
	UL 1,6 mm Wall thickness	HB Class
	UL 3,2 mm Wall thickness	HB Class
HWI UL 746A	UL 0,4 mm Wall thickness	4 PLC
	UL 0,8 mm Wall thickness	4 PLC
	UL 1,6 mm Wall thickness	4 PLC
	UL 3,2 mm Wall thickness	4 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
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+

General Properties

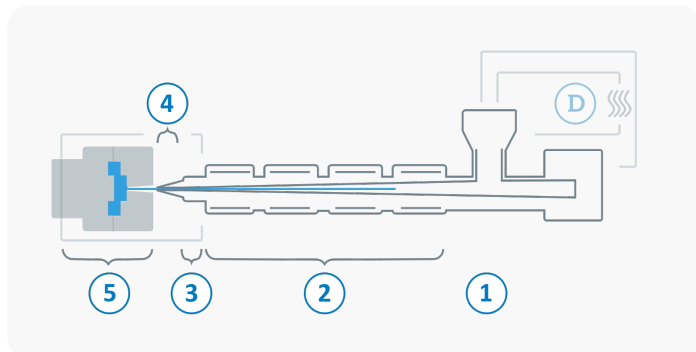
Density ISO 1183	23°C	1,71 g/cm ³
Molding shrinkage ISO 294-4	flow	0,1 - 0,2 %
	transverse	0,4 - 0,6 %

Electrical Properties

Volume resistivity IEC 62631-3-1	UL d.a.m.	10¹¹ 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 3 mm	12 kV/mm
High voltage arc tracking rate (HVTR) UL 746A	UL	1 PLC
High Volt, Low Current Arc Resistance ASTM D495	UL	5 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	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 - 310 °C
4	Melt temperature	280 - 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