

AKROMID® PRELIMINARY

A3 GF 25 HU natural (7236)

PA66 GF25

AKROMID® A3 GF 25 HU natural (7236) is a 25% glass fibre reinforced, heat stabilised polyamide 6.6 with high rigidity and strength. Furthermore, the material is heat stabilised and therefore perfectly suitable for technical parts in industrial engineering and in the automotive industry. Additionally, it is listed at UL in all colors. The material has a light inherent color.

Features

heat stabilised 130

Regulatory



Properties

Modulus

8.500 MPa

Strength

185 MPa

Impact

70 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

8500 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.

70 kJ/m²

23°C | conditioned

90 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

10 kJ/m²

23°C | conditioned

14 kJ/m²

Thermal Properties

RTI electrical UL 746B	UL 0,8mm Wall thickness	125 °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	120 °C
	UL 1,6mm Wall thickness	130 °C
	UL 3,2mm Wall thickness	130 °C
Temperature of deflection under load HDT/A ISO 75	1,8 MPa	255 °C
Temperature of deflection under load HDT/B ISO 75	0,45 MPa	260 °C
Melting temperature ISO 11357-3	DSC, 10K/min	262 °C

Flammability

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

General Properties

Density ISO 1183	23°C	1,32 g/cm³
Humidity absorption ISO 1110	70°C, 62% r.H.	2,0 - 2,2 %
Water absorption ISO 62	23°C, saturated	5,7 - 6,3 %

Molding shrinkage

ISO 294-4

flow

0,1 - 0,3 %

transverse

0,8 - 1,0 %

Electrical Properties

Comparative tracking index

IEC 60112

Test liquid A

600 V

Comparative tracking index

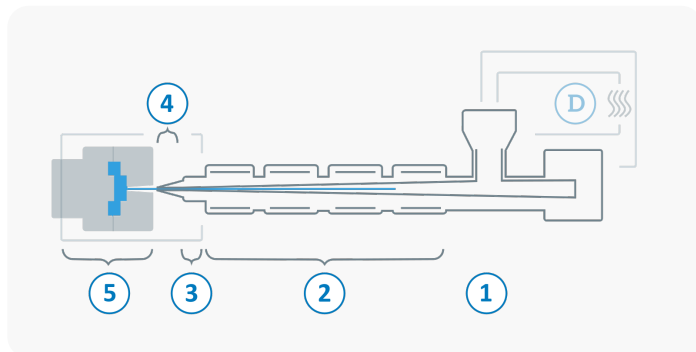
ASTM D3638



0 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

Diagrams

