

PA6.6 – Polyamide 6.6 PA66 GF 45

## AKROMID® A3 GF 45 HU black (7187)

Tensile modulus

### 14500 MPa

 1 mm/min  
 ISO 527-2

Stress at break

### 235 MPa

 5 mm/min  
 ISO 527-2

Charpy impact strength

### 23° C

ISO 179-1/1eU

AKROMID® A3 GF 45 HU black (7187) is a 35% glass fibre reinforced, heat

stabilised polyamide 6.6 with high rigidity and strength, listed at UL in all colors.

### Typical applications

Components in mechanical engineering and in the

automotive industry

### Regulatory



### Mechanical Properties

Tensile modulus (1 mm/min | ISO 527-2)

d.a.m.

14500 MPa

conditioned

10900 MPa

Stress at break (5 mm/min | ISO 527-2)

d.a.m.

235 MPa

conditioned

170 MPa

Strain at break (5 mm/min | ISO 527-2)

d.a.m.

2,7 %

conditioned

3,7 %



### Thermal Properties

RTI electrical 0,8mm Wall thickness (UL 746B)

130 °C

RTI electrical 1,6mm Wall thickness (UL 746B)

130 °C

RTI electrical 3,2mm Wall thickness (UL 746B)

130 °C

RTI impact 0,8mm Wall thickness (UL 746B)

120 °C

RTI impact 1,6mm Wall thickness (UL 746B)

120 °C

RTI impact 3,2mm Wall thickness (UL 746B)

120 °C

RTI strength 0,8mm Wall thickness (UL 746B)

130 °C

RTI strength 1,6mm Wall thickness (UL 746B)

130 °C

RTI strength 3,2mm Wall thickness (UL 746B)

130 °C

Temperature of deflection under load HDT/A (1,8 MPa | ISO 75)

260 °C

Temperature of deflection under load HDT/B (0,45 MPa | ISO 75)

260 °C

Temperature of deflection under load HDT/C (8 MPa | ISO 75)

235 °C

Melt temperature (DSC, 10K/min | DIN EN 11357-1)

262 °C

#### Disclaimer:

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### Flammability

#### Burning rate (UL 94)

0,8mm Wall thickness	HB Class
1,6mm Wall thickness	HB Class
3,2mm Wall thickness	HB Class

#### HWI (UL 746A)

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

#### HAI (UL 746A)

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



### General properties

Density (23°C   ISO 1183)	1,52 g/cm <sup>3</sup>
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Humidity absorption (70°C, 62% r.H.   ISO 1110)	1,5-1,7 %
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### Electrical Properties

Comparative tracking index (Test liquid A   IEC 60112)	>600 V
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Dielectric strength (3 mm   IEC 60243)	12 kV/mm
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High voltage tracking rate, HVTR (UL 746A)	1 PLC
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#### Disclaimer:

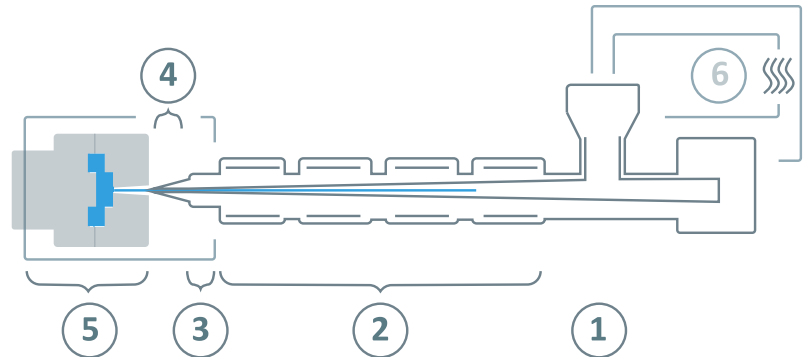
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### Processing information

The listed values are recommendations. Higher values should be used for higher glass loadings. We recommend only dehumidifying or vacuum dryers. Extensive drying can cause filling problems and surface defects.



⑥	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

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