

AKROLOY®

PA GF 60 black (7789)

PA66+PA6I/6T GF60

AKROLOY® PA GF 60 black (7789) is a 60% glass fibre reinforced, easyflow, semi-aromatic polyamide-blend with very high stiffness and strength, even in conditioned state.

Features

easy flow

Properties

Modulus

21.400 MPa

Strength

290 MPa

Impact

100 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

21400 MPa

1 mm/min | conditioned

20000 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

290 MPa

5 mm/min | conditioned

245 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,5 %

5 mm/min | conditioned

3 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

100 kJ/m²

23°C | conditioned

100 kJ/m²

-30°C | d.a.m.

95 kJ/m²

-30°C | conditioned

95 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

19 kJ/m²

23°C | conditioned

19 kJ/m²

-30°C | d.a.m.

18 kJ/m²

-30°C | conditioned

18 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	245 °C
Temperature of deflection under load HDT/B ISO 75	0,45 MPa	240 °C
Temperature of deflection under load HDT/C ISO 75	8 MPa	200 °C
Melting temperature ISO 11357-3	DSC, 10K/min	255 °C

Flammability

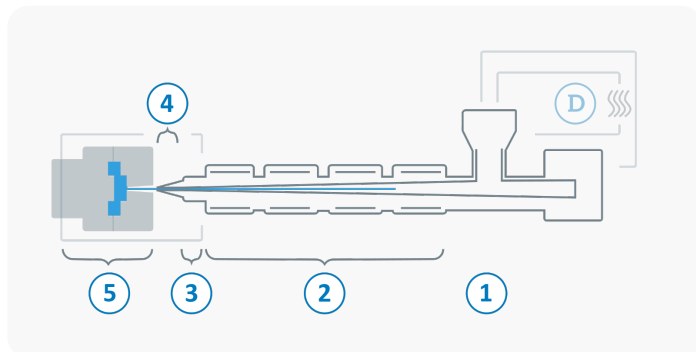
Flammability UL 94	0,8 mm Wall thickness	HB Class
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General Properties

Density ISO 1183	23°C	1,72 g/cm³
Humidity absorption ISO 1110	70°C, 62% r.H.	1,1 %
Molding shrinkage ISO 294-4	flow	0,1 - 0,3 %
	transverse	0,2 - 0,4 %

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 - 300 °C
4	Melt temperature	280 - 300 °C
5	Mold temperature	90 - 130 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min