

AKROLOY®

PA GF 20 black (5485)

PA66+PA6I/6T GF20

AKROLOY® PA GF 20 black (5485) is a 20% glass fibre reinforced, semi-aromatic polyamide blend with average stiffness and strength, even in conditioned state.

Features

reduced moisture metal substitution

Properties

Modulus

7.000 MPa

Strength

145 MPa

Impact

40 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

7000 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

145 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,5 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

40 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

7,5 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

215 °C

Temperature of deflection under load HDT/B

ISO 75

0,45 MPa

245 °C

Melting temperature

ISO 11357-3

DSC, 10K/min

245 °C

Flammability

Flammability

UL 94

1,6 mm Wall thickness

HB Class

Burning rate (<100 mm/min)

FMVSS 302

> 1 mm Thickness

+

General Properties

Density

ISO 1183

23°C

1,32 g/cm³

Molding shrinkage

ISO 294-4

flow

0,2 - 0,4 %

transverse

0,6 - 0,8 %

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