

# AKROLEN® PRELIMINARY

## PP LGF 40 2 black (8488)

PP LGF40

AKROLEN® PP LGF 40 2 black (8488) is a polypropylene copolymer with 40% long glass fibre reinforcement which leads to a very high stiffness and strength. The materials very good surface quality as well as the outstanding UV-stability make it the product of your choice for technical parts which are exposed to UV radiation. This type is also available with biomass-balanced PP copo to reduce the CO2 footprint = AKROLEN® NEXT PP LGF 40 2 black (8488BMBCI).

### Features

UV-stabilised   Sports & leisure

### Properties

Modulus

**10.100 MPa**

Strength

**130 MPa**

Impact

**81 kJ/m<sup>2</sup>**

## Mechanical Properties

### Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

**10100 MPa**

### Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

**130 MPa**

### Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

**2 %**

### Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

**81 kJ/m<sup>2</sup>**

### Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

**32 kJ/m<sup>2</sup>**

## Thermal Properties

### Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

**160 °C**

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**Melting temperature**

ISO 11357-3

DSC, 10K/min

**165 °C**

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**General Properties**

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**Density**

ISO 1183

23°C

**1,23 g/cm<sup>3</sup>**

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**Molding shrinkage**

ISO 294-4

flow

**0,3 - 0,5 %**

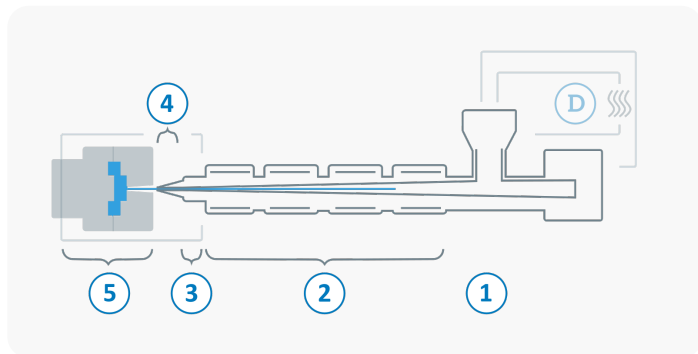
transverse

**0,4 - 0,6 %**

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## 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.



<b>D</b>	Drying time	0 - 3 h
	Drying temperature ( $\tau \leq -30^{\circ}\text{C}$ )	80 °C
	Processing moisture	0,1 %
<b>1</b>	Feed section	40 - 80 °C
<b>2</b>	Temperature Zone 1 - Zone 4	200 - 255 °C
<b>3</b>	Nozzle temperature	200 - 255 °C
<b>4</b>	Melt temperature	215 - 265 °C
<b>5</b>	Mold temperature	30 - 80 °C
<b>→</b>	Holding pressure, spec.	300 - 800 bar
<b>←</b>	Back pressure, spec.	10 - 30 bar
	Injection speed	slow to medium
	Screw speed	5 - 15 m/min