

AKROLEN®

PP LGF 40 1 black (8435)

PP LGF40

AKROLEN® PP LGF 40 1 black (8453) is a polypropylene Homopolymer with 40% long glass fibre reinforcement which leads to a very high stiffness and strength even at higher temperatures. Furthermore, it is heat stabilised and therefore perfectly suitable for industrial applications as well as for applications in the sports and leisure sector which are exposed to higher temperatures.

Features

heat stabilised 130 Sports & leisure

Properties

Modulus

10.800 MPa

Strength

160 MPa

Impact

81 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

10800 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

160 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/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

35 kJ/m²

Izod impact strength

ISO 180/1A

23°C | d.a.m.

58 kJ/m²

Izod notched impact strength

ISO 180/1A

23°C | d.a.m.

20 kJ/m²

Thermal Properties

Melting temperature

ISO 11357-3

DSC, 10K/min

165 °C

General Properties

Density

ISO 1183

23°C

1,23 g/cm³

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