

AKROTEK® PRELIMINARY

PK-VM GF 30 LT black (8901)

PK GF30

AKROTEK® PK-VM GF 30 LT black (8901) is a 30% glass fibre reinforced, lasertransparent low viscous polyketone with high stiffness and strength. Due to its very good media resistance, the material is suitable for use in applications that carry cooling water. This type was developed as the successor to PK-VM GF 30 LT black (8653) in order to meet the requirements for a larger processing window during processing.

Features

laser transparent

Properties

Modulus

8.500 MPa

Strength

110 MPa

Impact

40 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

8500 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

110 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,0 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

40 kJ/m²

Thermal Properties

Melting temperature

ISO 11357-3

DSC, 10K/min

220 °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

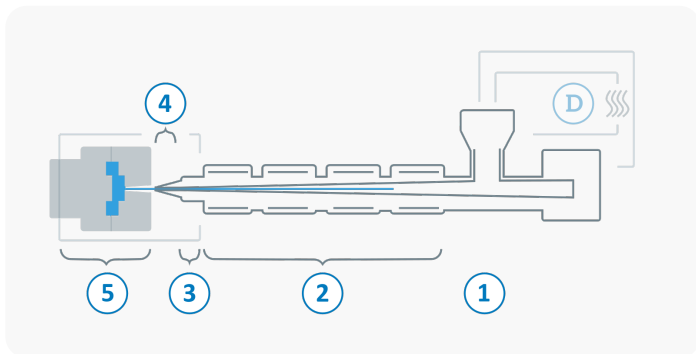
ISO 1183

23°C

1,45 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 - 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	220 - 260 °C
3	Nozzle temperature	230 - 260 °C
4	Melt temperature	230 - 260 °C
5	Mold temperature	60 - 120 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	30 - 70 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min