

PRECITE® PRELIMINARY

K GF 30 4 LA ECO black (8699)

PBT-PET- GF 30

PRECITE® K GF 30 4 ECO black (8699) is a 30% glass fibre reinforced, hydrolysis stabilised PBT/PET blend with high strength. Due to its low moisture absorption, this material is particularly suitable for precision parts in the automotive, E&E or appliances industries. The formulations of the sustainable ECO products are partly based on regenerated post-consumer feedstock and thus contribute to reducing the consumption of valuable raw materials

Features

hydrolysis / chemically stabilised recycled content reduced moisture E&E Sports & leisure

Properties

Modulus

9.500 MPa

Strength

120 MPa

Impact

65 kJ/m²

Sustainability

Recycled content 25 %

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

9500 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

120 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

65 kJ/m²

-30°C | d.a.m.

65 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

17 kJ/m²

Thermal Properties

Melting temperature	DSC, 10K/min	245 °C
ISO 11357-3		

General Properties

Density	23°C	1,47 g/cm³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	0,1 - 0,3 %
ISO 1110		

Molding shrinkage	flow	0,2 - 0,4 %
ISO 294-4	transverse	0,7 - 0,9 %

Electrical Properties

Comparative tracking index	Test liquid A	550 V
IEC 60112		

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	3 - 4 h
	Drying temperature ($\tau \leq -30^{\circ}\text{C}$)	120 - 140 $^{\circ}\text{C}$
	Processing moisture	$\leq 0,02 \%$
1	Feed section	60 - 80 $^{\circ}\text{C}$
2	Temperature Zone 1 - Zone 4	260 - 280 $^{\circ}\text{C}$
3	Nozzle temperature	260 - 290 $^{\circ}\text{C}$
4	Melt temperature	270 - 280 $^{\circ}\text{C}$
5	Mold temperature	80 - 100 $^{\circ}\text{C}$
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	30 - 100 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min