

# PRECITE® PRELIMINARY

## K GF 50 natural (7435)

PBT-PET- GF 50

PRECITE® K GF 50 natural (7435) is a 50% glass fibre reinforced PBT/PET blend with very high strength and improved surface finish. Due to its low moisture absorption, this material is particularly suitable for precision parts in the automotive, E&E or appliances industries.

### Features

surface modified   reduced moisture   E&E   Sports & leisure

### Properties

Modulus

20.000 MPa

Strength

175 MPa

Impact

60 kJ/m<sup>2</sup>

## Mechanical Properties

### Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

20000 MPa

### Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

175 MPa

### Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

1,3 %

### Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

60 kJ/m<sup>2</sup>

### Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

18 kJ/m<sup>2</sup>

## Thermal Properties

### Melting temperature

ISO 11357-3

DSC, 10K/min

250 °C

## General Properties

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**Density**

ISO 1183

23°C

**1,75 g/cm<sup>3</sup>**

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

## Diagrams

