

# PRECITE® PRELIMINARY

## E GF 35 natural (7626)

PET GF35

PRECITE® E GF 35 natural (7626) is a 35% glass fibre reinforced, medium viscous polyethylene terephthalate (PET) with high stiffness and toughness even at elevated temperatures. Due to its low moisture absorption, this material is particularly dimensionally stable and therefore perfectly suitable for precision parts in the automotive, E&E and household goods industries, where a very good surface finish is required.

### Features

surface modified   reduced moisture   metal substitution   Sports & leisure

### Properties

Modulus

12.600 MPa

Strength

180 MPa

Impact

55 kJ/m<sup>2</sup>

## Mechanical Properties

### Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

12600 MPa

### Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

180 MPa

### Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,3 %

### Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

55 kJ/m<sup>2</sup>

### Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

9 kJ/m<sup>2</sup>

## Thermal Properties

### Temperature of deflection under load HDT/A

ISO 75

1,8 MPa

224 °C

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**Melting temperature**

ISO 11357-3

DSC, 10K/min

**250 °C**

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**Flammability**

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**Flammability**

UL 94

0,8 mm Wall thickness

**HB Class**

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**General Properties**

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**Density**

ISO 1183

23°C

**1,63 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 °C
	Processing moisture	$\leq 0,02\%$
<b>1</b>	Feed section	60 - 80 °C
<b>2</b>	Temperature Zone 1 - Zone 4	270 - 290 °C
<b>3</b>	Nozzle temperature	270 - 295 °C
<b>4</b>	Melt temperature	270 - 290 °C
<b>5</b>	Mold temperature	130 - 160 °C
$\rightarrow$	Holding pressure, spec.	300 - 800 bar
$\leftarrow$	Back pressure, spec.	30 - 100 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min

## Diagrams

