

PBT – Polybutyleneterephthalate PBT GF30

## PRECITE® P1 GF 30 natural (7062)

Tensile modulus

**9800 MPa**

1 mm/min  
ISO 527-2

Stress at break

**150 MPa**

5 mm/min  
ISO 527-2

Charpy impact strength

**75 kJ/m<sup>2</sup>**

23°C  
ISO 179-1/1eU

PRECITE® P1 GF 30 natural (7062) is a 30% glass fibre reinforced, low viscous polybutylene terephthalate (PBT) with high stiffness and toughness as well as high dimensional stability and chemical resistance.

### Typical applications

Technical and precision parts in automobile, industrial, E/E and appliances industry



### Mechanical Properties

Tensile modulus (1 mm/min   ISO 527-2) d.a.m.	9800 MPa
Stress at break (5 mm/min   ISO 527-2) d.a.m.	150 MPa
Strain at break (5 mm/min   ISO 527-2) d.a.m.	3,1 %
Charpy impact strength (23°C   ISO 179-1/1eU) d.a.m.	75 kJ/m <sup>2</sup>
Charpy notched impact strength (23°C   ISO 179-1/1eA) d.a.m.	11 kJ/m <sup>2</sup>



### Flammability

Burning rate (UL 94) 0,8mm Wall thickness	HB Class
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### General properties

Density (23°C   ISO 1183)	1,53 g/cm <sup>3</sup>
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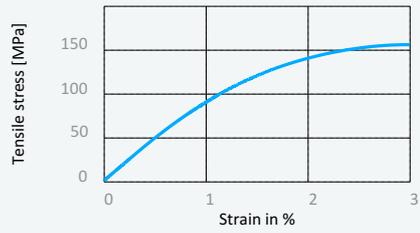
### Rheological Properties

MVR (250°C/2,16kg   ISO 1133)	10 cm <sup>3</sup> /10min
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#### Disclaimer:

All specifications and information given on this website are based on our current knowledge and experience. A legally binding promise of certain characteristics or suitability for a concrete individual case cannot be derived from this information. The information supplied here is not intended to release processors and users from the responsibility of carrying out their own tests and inspections in each concrete individual case. AKRO®, AKROMID®, AKROLEN®, AKROLOY®, AKROTEK®, ICX® and PRECITE® are registered trademarks of the Feddersen Group.

Stress strain chart at 23°C



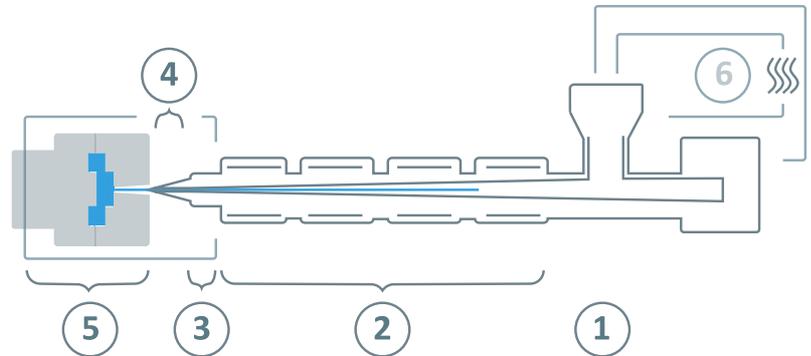
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**PRECITE® P1 GF 30 natural (7062)****Processing information**

The listed values are recommendations. Higher values should be used for higher glass loadings. We recommend only dehumidifying or vacuum dryers. Extensive drying can cause filling problems and surface defects.



⑥	Drying time	3 - 4 h
	Drying temperature ( $\tau \leq -30^{\circ}\text{C}$ )	100 - 120°C
	Processing moisture	0,02 - 0,04%
①	Feed section	60 - 80°C
②	Temperature zone 1 - Zone 4	250 - 275°C
③	Nozzle temperature	250 - 280°C
④	Melt temperature	260 - 275°C
⑤	Mold temperature	80 - 100°C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	30 - 100 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min

**Warning**

Due to hydrolysis sensitivity of polyesters, a careful drying of the material before processing is very important. High residual moisture contents causes, in addition to surface defects, a decomposition of the molecular chains and thus reduced mechanical properties. If there are longer interruptions of the process, the cylinder temperature should be lowered. Furthermore, we recommend a thorough cleaning of the screw cylinder with extended dwell time or a material change. Glass-fiber-reinforced polyolefins (PE, PP) have established a particularly good cleaning effect.

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