

PRECITE® PRELIMINARY

E GF 30 4 black (8622)

PET-I GF30

PRECITE® E GF 30 4 black (8622) is a 30% glass fibre reinforced and hydrolysis stabilised Polyethylene terephthalate (PET). It is characterised by a high stiffness and toughness as well as good chemical resistance. This formulation is GMA free (glycidyl methacrylate) and meets the VW-50136 standard. Furthermore, the material impresses with very good dimensional stability due to its low moisture absorption. Therefore, the material is perfectly suitable for technical precision components in applications in the automotive industry, mechanical engineering, E&E and household goods industries with increased humidity.

Features

hydrolysis / chemically stabilised low warpage reduced moisture Sports & leisure

Properties

Modulus

9.400 MPa

Strength

135 MPa

Impact

70 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

9400 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

135 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,7 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

70 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

14 kJ/m²

Flammability

Flammability

UL 94

0,8 mm Wall thickness

HB Class

General Properties

Molding shrinkage

ISO 294-4

flow

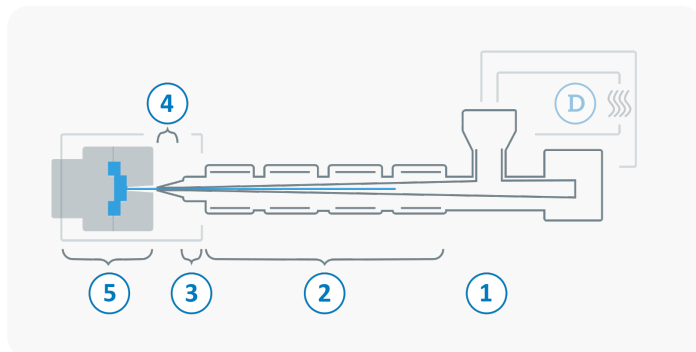
0,2 - 0,4 %

transverse

0,8 - 1,0 %

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	270 - 290 $^{\circ}\text{C}$
3	Nozzle temperature	270 - 295 $^{\circ}\text{C}$
4	Melt temperature	270 - 290 $^{\circ}\text{C}$
5	Mold temperature	130 - 160 $^{\circ}\text{C}$
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	30 - 100 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min