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AKRO COMPOUNDS

Compound No.: **7395**

PRECITE® PRELIMINARY
E GF 50 black (7395)

PET GF50

PRECITE® E GF 50 black (7395) is a 50% glass fibre reinforced, medium viscous polyethylene terephthalate (PET) with very 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 | E&E | metal substitution | Sports & leisure

Properties

Modulus	Strength	Impact
18.000 MPa	**210** MPa	**60** kJ/m²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min | d.a.m.	**18000 MPa**
Tensile stress at break ISO 527-2	5 mm/min | d.a.m.	**210 MPa**
Tensile strain at break ISO 527-2	5 mm/min | d.a.m.	**1,7 %**
Charpy impact strength ISO 179-1/1eU	23°C | d.a.m.	**60 kJ/m²**
Charpy notched impact strength ISO 179-1/1eA	23°C | d.a.m.	**11 kJ/m²**

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	**235 °C**

Melting temperature ISO 11357-3	DSC, 10K/min	**250 °C**

Flammability

Flammability UL 94	0,8 mm Wall thickness	**HB Class**

General Properties

Density ISO 1183	23°C	**1,75 g/cm³**
Molding shrinkage ISO 294-4	flow transverse	**0,1 - 0,3 %** **0,5 - 0,7 %**

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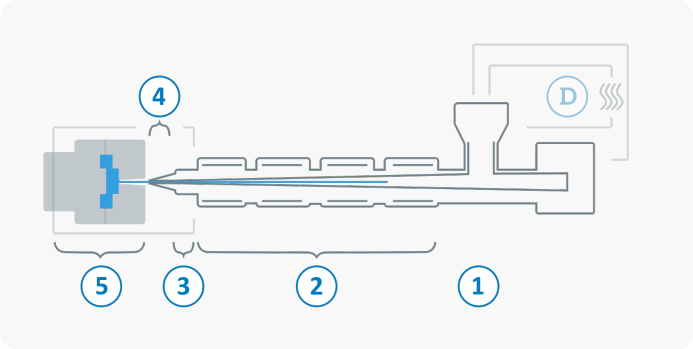
Processing

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.



D	Drying time	3 - 4 h
	Drying temperature (τ <= -30°C)	120 - 140 °C
	Processing moisture	≤0,02 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	270 - 290 °C
3	Nozzle temperature	270 - 295 °C
4	Melt temperature	270 - 290 °C
5	Mold temperature	130 - 160 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	30 - 100 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min

Diagrams