+135-3858-6433 (GuangDong)
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AKRO COMPOUNDS

Compound No.: **8242**

PRECITE® PRELIMINARY

P3 GF 30 4 natural (8242)

PBT-I GF30

PRECITE®P3 GF 30 4 natur (8242) is a 30% glass fibre reinforced and hydrolysis stabilised polybutylene terephthalate (PBT). 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 | E&E | Sports & leisure

Properties

Modulus	Strength	Impact
9.000 MPa	**120** MPa	**75** kJ/m²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min | d.a.m.	**9000 MPa**
Tensile stress at break ISO 527-2	5 mm/min | d.a.m.	**120 MPa**
Tensile strain at break ISO 527-2	5 mm/min | d.a.m.	**3,5 %**
Charpy impact strength ISO 179-1/1eU	23°C | d.a.m. -30°C | d.a.m.	**75 kJ/m²** **70 kJ/m²**
Charpy notched impact strength ISO 179-1/1eA	23°C | d.a.m. -30°C | d.a.m.	**14 kJ/m²** **12 kJ/m²**

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	**200 °C**

Flammability

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

General Properties

Density ISO 1183	23°C	**1,48 g/cm³**
Molding shrinkage ISO 294-4	flow transverse	**0,2 - 0,4 %** **0,8 - 1,0 %**

Electrical Properties

Comparative tracking index IEC 60112	Test liquid A	**600 V**

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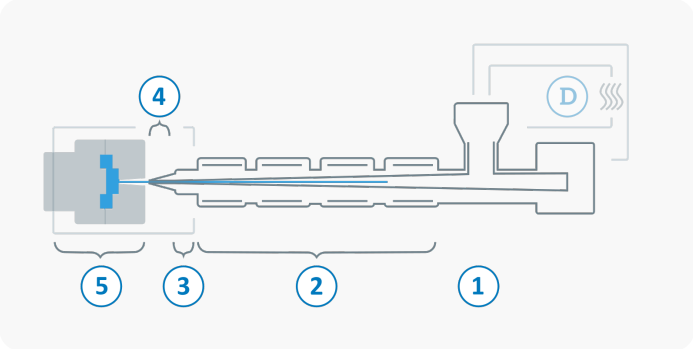
Processing

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)	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

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Diagrams