+135-3858-6433 (GuangDong)
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AKRO COMPOUNDS

Compound No.: **8173**

AKROMID® PRELIMINARY
T9 GF 30 1 natural (8173)

PPA GF30

AKROMID® T9 GF 30 1 natural (8173) is a 30% glass fibre reinforced polyphthalamide with heat stabilization, high rigidity and strength, as well as high temperature and chemical resistance. The compound is based on PA9T and has lower moisture uptake than conventional PA6T variants. This leads to a significantly higher consistency of the glass transition temperature and higher strength at elevated temperatures especially in conditioned state.

Features

heat stabilised 130 | electrically neutral

Properties

Modulus	Strength	Impact
9.400 MPa	**200** MPa	**80** 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.	**200 MPa**
Tensile strain at break ISO 527-2	5 mm/min | d.a.m.	**3,2 %**
Charpy impact strength ISO 179-1/1eU	23°C | d.a.m.	**80 kJ/m²**
Charpy notched impact strength ISO 179-1/1eA	23°C | d.a.m.	**11 kJ/m²**

Thermal Properties

Melting temperature ISO 11357-3	DSC, 10K/min	**305 °C**

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Flammability

Flammability UL 94	1,6 mm Wall thickness	**HB Class**

General Properties

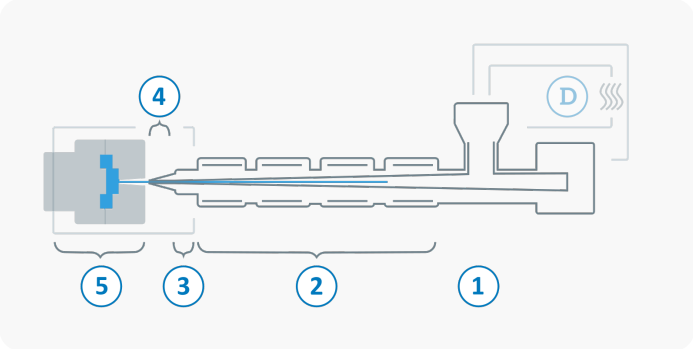
Density ISO 1183	23°C	**1,38 g/cm³**
Humidity absorption ISO 1110	70°C, 62% r.H.	**0,8 - 1,0 %**
Molding shrinkage ISO 294-4	flow transverse	**0,2 - 0,4 %** **0,7 - 0,9 %**

Electrical Properties

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

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	0 - 4 h
	Drying temperature (τ <= -30°C)	120 °C
	Processing moisture	<0,05 %
1	Feed section	60 - 90 °C
2	Temperature Zone 1 - Zone 4	300 - 340 °C
3	Nozzle temperature	310 - 350 °C
4	Melt temperature	310 - 340 °C
5	Mold temperature	>135 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min