+135-3858-6433 (GuangDong)
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AKRO COMPOUNDS

Compound No.: **6765**

AKROLOY® PRELIMINARY
PA FGF 60 black (6765)

PA66 + PA6I/6T GF 60

AKROLOY® PA FGF 60 black (6765) is a 60% flat glass fiber reinforced, semi-aromatic polyamide blend. Due to the flat glass fiber, the material is characterised by significantly improved properties 90° to the flow direction as well as low warpage. Even in conditioned state, it impresses with very high stiffness and strength owing to its lower moisture uptake. The material is perfectly suitable for parts where dimensional stabilitiy is required. Furthermore, it can be used as an alternative for aluminium and zinc diecast alloys.

Features

low warpage | reduced moisture | metal substitution

Properties

Modulus	Strength	Impact
20.000 MPa	**290** MPa	**90** kJ/m²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min | d.a.m. 1 mm/min | conditioned	**20000 MPa** **19500 MPa**
Tensile stress at break ISO 527-2	5 mm/min | d.a.m. 5 mm/min | conditioned	**290 MPa** **240 MPa**
Tensile strain at break ISO 527-2	5 mm/min | d.a.m. 5 mm/min | conditioned	**2,1 %** **2,1 %**
Flexural modulus ISO 178	2 mm/min | d.a.m.	**20000 MPa**
Flexural strength ISO 178	2 mm/min | d.a.m.	**420 MPa**
Flexural strain at break ISO 178	2 mm/min | d.a.m.	**2,5 %**
Charpy impact strength ISO 179-1/1eU	23°C | d.a.m. 23°C | conditioned	**90 kJ/m²** **90 kJ/m²**

Thermal Properties

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

General Properties

Density ISO 1183	23°C	**1,69 g/cm³**
Humidity absorption ISO 1110	70°C, 62% r.H.	**1,1 %**
Molding shrinkage ISO 294-4	flow transverse	**0,1 - 0,3 %** **0,2 - 0,4 %**

Rheological Properties

Flowability AKRO	1 mm Thickness 2 mm Thickness	**160 mm** **540 mm**

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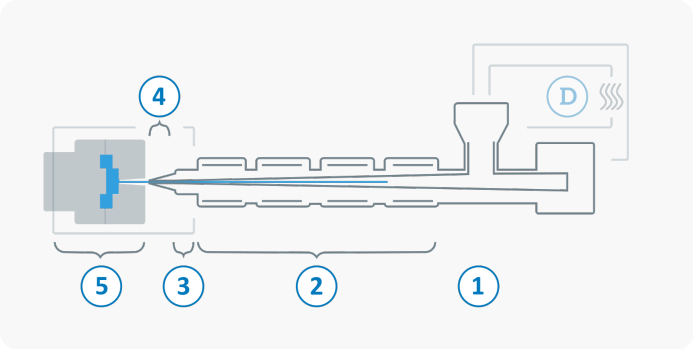
Processing

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	0 - 4 h
	Drying temperature (τ <= -30°C)	80 °C
	Processing moisture	0,02 - 0,1 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	260 - 300 °C
3	Nozzle temperature	270 - 300 °C
4	Melt temperature	280 - 300 °C
5	Mold temperature	90 - 130 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min