+135-3858-6433 (GuangDong)
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AKRO COMPOUNDS

Compound No.: **8394**

AKROLOY® PRELIMINARY

PARA GF 50 8 black (8394)

PARA GF50

AKROLOY® PARA GF 50 8 black (8394) is a 50% glass fibre reinforced polyarylamid with very high stiffness and strength. Even in conditioned state, it impresses with very high stiffness and strength owing to its lower moisture uptake. Furthermore, the material shows very good flowability and surface properties. It is perfectly suitable for parts where dimensional stabilitiy is required. Besides, it can be used as an alternative for aluminium and zinc diecast alloys. The material corresponds to the European food guideline EU 10/2011 and to the American FDA 21 CFR. This grade is suitable for parts of kitchen and household appliances.

Features

reduced moisture | easy flow | metal substitution

Regulatory

E 10/2011 | FDA

Properties

Modulus	Strength	Impact
20.000 MPa	**290** MPa	**74** kJ/m²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min | d.a.m.	**20000 MPa**
Tensile stress at break ISO 527-2	5 mm/min | d.a.m.	**290 MPa**
Tensile strain at break ISO 527-2	5 mm/min | d.a.m.	**1,9 %**
Charpy impact strength ISO 179-1/1eU	23°C | d.a.m.	**74 kJ/m²**
Charpy notched impact strength ISO 179-1/1eA	23°C | d.a.m.	**18 kJ/m²**

Thermal Properties

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Temperature of deflection under load HDT/A ISO 75	1,8 MPa	**230 °C**
Melting temperature ISO 11357-3	DSC, 10K/min	**238 °C**

General Properties

Density ISO 1183	23°C	**1,65 g/cm³**
Molding shrinkage ISO 294-4	flow	**0,0 - 0,2 %**
	transverse	**0,2 - 0,4 %**

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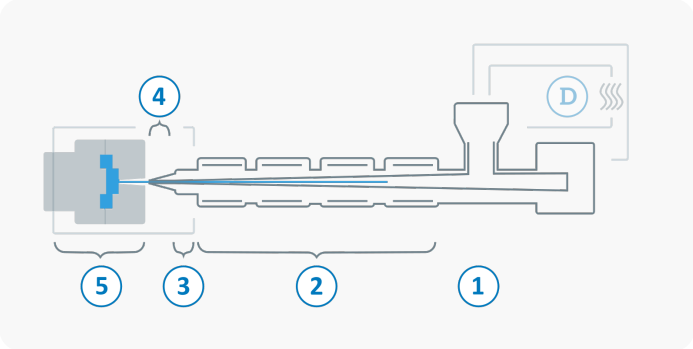
Processing

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	4 - 12 h
	Drying temperature (τ <= -30°C)	80 - 90 °C
	Processing moisture	0,02 - 0,1 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	250 - 300 °C
3	Nozzle temperature	270 - 300 °C
4	Melt temperature	270 - 300 °C
5	Mold temperature	120 - 160 °C
→	Holding pressure, spec.	300 - 1500 bar
←	Back pressure, spec.	50 -150 bar
	Injection speed	high
	Screw speed	8 - 10 m/min