+135-3858-6433 (GuangDong)
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AKRO COMPOUNDS

Compound No.: **8280**

AKROMID® PRELIMINARY
B25 GF 50 LA black (8280)

PA6 GF50

AKROMID® B25 GF 50 LA black (8280) is a 50% glass fibre reinforced, heat stabilised, easy flowing polyamide 6 with very high stiffness and strength, lasermarkable.

Features

laser markable | easy flow

Properties

Modulus	Strength	Impact
15.500 MPa	**235** MPa	**100** kJ/m²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min | d.a.m. 1 mm/min | conditioned	**15500 MPa** **10300 MPa**
Tensile stress at break ISO 527-2	5 mm/min | d.a.m. 5 mm/min | conditioned	**235 MPa** **145 MPa**
Tensile strain at break ISO 527-2	5 mm/min | d.a.m. 5 mm/min | conditioned	**2,8 %** **4,3 %**
Charpy impact strength ISO 179-1/1eU	23°C | d.a.m. 23°C | conditioned	**100 kJ/m²** **110 kJ/m²**
Charpy notched impact strength ISO 179-1/1eA	23°C | d.a.m. 23°C | conditioned	**20 kJ/m²** **25 kJ/m²**

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	**220 °C**
Temperature of deflection under load HDT/B ISO 75	0,45 MPa	**220 °C**

Temperature of deflection under load HDT/C ISO 75	8 MPa	**185 °C**
Melting temperature ISO 11357-3	DSC, 10K/min	**220 °C**

Flammability

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

General Properties

Density ISO 1183	23°C	**1,56 g/cm³**
Humidity absorption ISO 1110	70°C, 62% r.H.	**1,3 - 1,6 %**
Water absorption ISO 62	23°C, saturated	**4,5 - 5,1 %**
Molding shrinkage ISO 294-4	flow transverse	**0,1 - 0,3 %** **0,4 - 0,6 %**

Electrical Properties

Volume resistivity IEC 62631-3-1	d.a.m.	**10^{13} Ω x cm**
Surface resistivity IEC 62631-3-2	d.a.m.	**10^{12} Ω**

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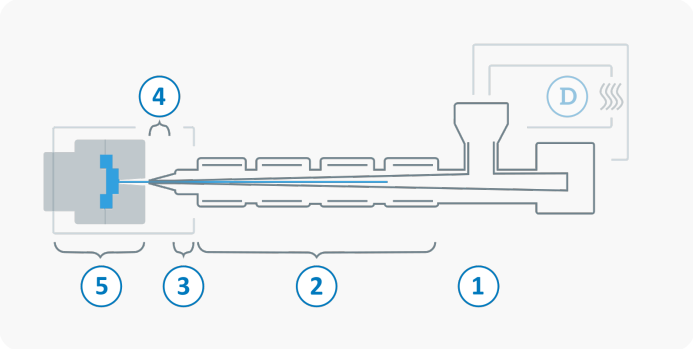
Processing

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	240 - 290 °C
3	Nozzle temperature	260 - 300 °C
4	Melt temperature	270 - 290 °C
5	Mold temperature	80 - 100 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min

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Diagrams