

AKROMID® B28 GF 30 6 LT black (8500)

PA6 GF30

AKROMID® B28 GF 30 6 LT black (8500) is a 30% glass fibre reinforced, easy flowing Polyamide 6. The material is characterised by high stiffness and strength. Furthermore, it is UV- and high heat stabilised and therefore perfectly suitable for automotive and industrial applications. The compound can be welded via laser welding.

Features

heat stabilised 160 UV-stabilised laser transparent

Properties

Modulus

9.800 MPa

Strength

185 MPa

Impact

90 kJ/m²

Mechanical Properties

Tensile modulus	1 mm/min d.a.m.	9800 MPa
ISO 527-2	1 mm/min conditioned	6400 MPa
Tensile stress at break	5 mm/min d.a.m.	185 MPa
ISO 527-2	5 mm/min conditioned	100 MPa
Tensile strain at break	5 mm/min d.a.m.	3 %
ISO 527-2	5 mm/min conditioned	5,5 %
Flexural modulus	2 mm/min d.a.m.	8000 MPa
ISO 178		
Flexural strength	2 mm/min d.a.m.	250 MPa
ISO 178		
Charpy impact strength	23°C d.a.m.	90 kJ/m²
ISO 179-1/1eU		
Charpy notched impact strength	23°C d.a.m.	12 kJ/m²
ISO 179-1/1eA		

Thermal Properties

Temperature of deflection under load HDT/A	1,8 MPa	210 °C
ISO 75		

Melting temperature	DSC, 10K/min	220 °C
ISO 11357-3		

Flammability

Flammability	1,6 mm Wall thickness	HB Class
UL 94		

Burning rate (<100 mm/min)	> 1 mm Thickness	+
FMVSS 302		

General Properties

Density	23°C	1,35 g/cm ³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	2,1 - 2,3 %
ISO 1110		

Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,5 - 0,7 %

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 ($\tau \leq -30^{\circ}\text{C}$)	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

Diagrams

