

AKROMID®

B28 GM 10/20 1 LA black (4790)

PA6 (GF10+GB20)

AKROMID® B28 GM 10/20 1 LA black (4790) is a 10% glass fiber and 20% glass beads reinforced easy flowing PA 6. It is characterised by a medium stiffness and strength. The material impresses with its laser markability along with very good surface properties and is therefore perfectly suitable for housings and covers in the automotive industry with high demands on the surface.

Features

heat stabilised 130 laser markable recycled content low warpage easy flow

Properties

Modulus	Strength	Impact
5.700 MPa	110 MPa	30 kJ/m ²

Sustainability

Recycled content 20 %

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min d.a.m.	5700 MPa
	1 mm/min conditioned	3000 MPa
Tensile stress at break ISO 527-2	5 mm/min d.a.m.	110 MPa
	5 mm/min conditioned	60 MPa
Tensile strain at break ISO 527-2	5 mm/min d.a.m.	2,6 %
	5 mm/min conditioned	10 %
Flexural modulus ISO 178	2 mm/min d.a.m.	5000 MPa
Flexural strength ISO 178	2 mm/min d.a.m.	170 MPa

Charpy impact strength	23°C d.a.m.	30 kJ/m ²
ISO 179-1/1eU	23°C conditioned	80 kJ/m ²
	-30°C d.a.m.	30 kJ/m ²

Charpy notched impact strength	23°C d.a.m.	4 kJ/m ²
ISO 179-1/1eA	23°C conditioned	7 kJ/m ²
	-30°C d.a.m.	4 kJ/m ²

Thermal Properties

Temperature of deflection under load HDT/A	1,8 MPa	200 °C
ISO 75		

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

Coefficient of linear thermal expansion	23°C to 80°C parallel	0,34 10 ⁻⁴ /K
ISO 11359-1/2	23°C to 80°C transverse	1,02 10 ⁻⁴ /K

Flammability

Flammability	1,6 mm Wall thickness	HB Class
UL 94		

GWFI	1,6 mm Wall thickness	650 °C
IEC 60695-2-12		

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	0,3 - 0,5 %
ISO 294-4	transverse	0,6 - 0,8 %

Electrical Properties

+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)



Compound No.: 4790

Surface resistivity

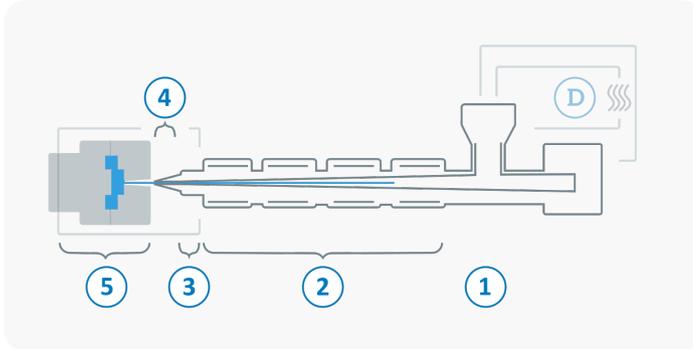
IEC 62631-3-2

d.a.m.

$10^5 \Omega$

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

