

Compound No.: 4289

AKROMID® B3 GF 30 2 S1 grey (4289)

PA6-I GF30

AKROMID® B3 GF 30 2 S1 grey (4289) is a 30% glass fiber reinforced, impact modified Polyamide 6 in grey (similar to RAL 7024). It is characterised by high stiffness and strength as well as a higher impact strength compared to a standard PA 6 GF 30. Furthermore, it is UV stabilised and laser markable. The material is therefore perfectly suitable for industrial applications and for housings and covers in the automotive industry.

Properties Modulus Strength 120 MPa 65 kJ/m²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min d.a.m.	8500 MPa
Tensile stress at break ISO 527-2	5 mm/min d.a.m.	120 MPa
Tensile strain at break ISO 527-2	5 mm/min d.a.m.	2,8 %
Flexural modulus ISO 178	2 mm/min d.a.m.	8300 MPa
Flexural strength ISO 178	2 mm/min d.a.m.	200 MPa
Charpy impact strength ISO 179-1/1eU	23°C d.a.m. -30°C d.a.m.	65 kJ/m² 63 kJ/m²
Charpy notched impact strength ISO 179-1/1eA	23°C d.a.m. -30°C d.a.m.	12 kJ/m² 7 kJ/m²



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Thermal Properties

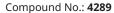
Temperature of deflection under load HDT/A ISO 75	1,8 MPa	205°C
Temperature of deflection under load HDT/C	8 MPa	120 °C
Melting temperature ISO 11357-3	DSC, 10K/min	220 °C

Flammability

Flammability UL 94	1,6 mm Wall thickness	HB Class
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+

General Properties

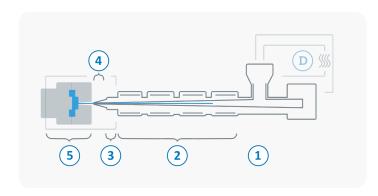
Density ISO 1183	23°C	1,34 g/cm³
Molding shrinkage ISO 294-4	flow transverse	0,1 - 0,3 % 0,5 - 0,7 %





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 (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
\Rightarrow	Holding pressure, spec.	300 - 800 bar
	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min