

AKROMID® A3 GF 30 S1 black (1365)

PA66-I GF30

AKROMID® A3 GF 30 S1 black (1365) is a 30% glass fiber reinforced, impact modified Polyamide 6.6. It is characterised by high stiffness and strength as well as a higher impact strength compared to a standard PA 6.6 GF 30. The material is perfectly suitable for connecting and fixing systems as well as for precision parts in the automotive industry.

Features

impact modified

Properties

Modulus	Strength	Impact
9.600 MPa	180 MPa	105 kJ/m²

Mechanical Properties

Tensile modulus	1 mm/min d.a.m.	9600 MPa
ISO 527-2	1 mm/min conditioned	8000 MPa
Tensile stress at break	5 mm/min d.a.m.	180 MPa
ISO 527-2	5 mm/min conditioned	120 MPa
Tensile strain at break	5 mm/min d.a.m.	5 %
ISO 527-2	5 mm/min conditioned	6 %
Charpy impact strength	23°C d.a.m.	105 kJ/m²
ISO 179-1/1eU	23°C conditioned	110 kJ/m²
	-30°C d.a.m.	85 kJ/m²
	-30°C conditioned	100 kJ/m ²
Charpy notched impact strength	23°C d.a.m.	17 kJ/m²
ISO 179-1/1eA	23°C conditioned	20 kJ/m²
	-30°C d.a.m.	12 kJ/m²
	-30°C conditioned	12 kJ/m²

Thermal Properties



Temperature of deflection under load HDT/A	1,8 MPa	255 °C
Melting temperature ISO 11357-3	DSC, 10K/min	262 °C

Flammability

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

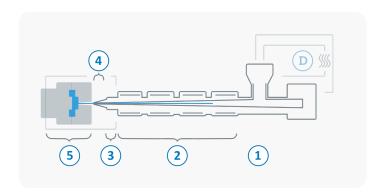
General Properties

Density ISO 1183	23°C	1,34 g/cm³
Humidity absorption ISO 1110	70°C, 62% r.H.	1,7 %
Molding shrinkage ISO 294-4	flow transverse	0,1 - 0,3 % 0,7 - 0,9 %



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	260 - 300 °C
3	Nozzle temperature	270 - 310 °C
4	Melt temperature	280 - 300 °C
5	Mold temperature	80 - 100 °C
\ominus	Holding pressure, spec.	300 - 800 bar
	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min



Diagrams

