

Compound No.: 7614

AKROMID® B3 GF 40 S1 LA black (7614)

PA6-I GF40

AKROMID® B3 GF 40 S1 LA black (7614) is a 40% glass fiber reinforced, impact modified Polyamide 6. It is characterised by a medium impact strength as well as a high stiffness and strength. Furthermore, 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 impact modified laser markable surface modified Properties Modulus Strength Impact 12.000 MPa 185 MPa 100 kJ/m²

Mechanical Properties

Tensile modulus	1 mm/min d.a.m.	12000 MPa
ISO 527-2	1 mm/min conditioned	8000 MPa
Tensile stress at break	5 mm/min d.a.m.	185 MPa
ISO 527-2	5 mm/min conditioned	145 MPa
Tensile strain at break	5 mm/min d.a.m.	3,8 %
ISO 527-2	5 mm/min conditioned	6 %
Charpy impact strength	23°C d.a.m.	100 kJ/m²
ISO 179-1/1eU	23°C conditioned	100 kJ/m²
	-30°C d.a.m.	100 kJ/m ²
Charpy notched impact strength	23°C d.a.m.	18 kJ/m²
ISO 179-1/1eA	23°C conditioned	23 kJ/m²
	-30°C d.a.m.	15 kJ/m²

Thermal Properties



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Temperature of deflection under load HDT/A	1,8 MPa	205 °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	1,42 g/cm³
Molding shrinkage ISO 294-4	flow transverse	0,1 - 0,3 % 0,5 - 0,7 %

Electrical Properties

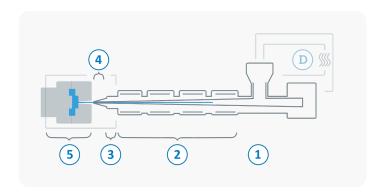
Comparative tracking index IEC 60112	Test liquid A	575 V





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



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Diagrams

