

Compound No.: 8353

AKROMID® PRELIMINARY B3 GF 40 1 black (8353)

PA6 GF40

AKROMID® B3 GF 40 1 black (8353) is a 40% glass fiber reinforced polyamide 6 which is characterised by excellent bonding to LSR (liquid silicone rubber). Furthermore, the material shows high stiffness and strength. On top of that, it is heat stabilised and low in emissions and therefore perfectly suitable for technical applications in industrial engineering and in the automotive industry, such as airbag applications.

Features

heat stabilised 130 adhesion modified

Properties

Modulus	Strength	Impact
13.000 MPa	195 MPa	100 kJ/m²

Mechanical Properties

Tensile modulus	1 mm/min d.a.m.	13000 MPa
ISO 527-2	1 mm/min conditioned	8300 MPa
Tensile stress at break	5 mm/min d.a.m.	195 MPa
ISO 527-2	5 mm/min conditioned	130 MPa
Tensile strain at break ISO 527-2	5 mm/min d.a.m.	3,5 %
Flexural modulus ISO 178	2 mm/min d.a.m.	12259 MPa
Flexural strength ISO 178	2 mm/min d.a.m.	305 MPa
Flexural strain at break ISO 178	2 mm/min d.a.m.	3,7 %
Charpy impact strength	23°C d.a.m.	100 kJ/m²
ISO 179-1/1eU	23°C conditioned	115 kJ/m²
	-30°C d.a.m.	85 kJ/m²



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Charpy notched impact strength ISO 179-1/1eA	23°C d.a.m. 23°C conditioned	16 kJ/m² 23 kJ/m²
	-30°C d.a.m.	12 kJ/m²

Thermal Properties

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

Flammability

Flammability UL 94	0,8 mm Wall thickness	HB Class

General Properties

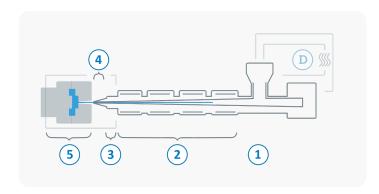
Density ISO 1183	23°C	1,46 g/cm³
Humidity absorption ISO 1110	70°C, 62% r.H.	1,8 %
Molding shrinkage ISO 294-4	flow transverse	0,1 - 0,3 % 0,5 - 0,7 %





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
\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