

AKROMID®

B3 GF 30 S1 white (3767)

PA6-I GF30

AKROMID® B3 GF 30 S1 white (3767) is a 30% glass fiber reinforced, impact modified Polyamide 6 in white color, similar to RAL 9010. It is characterised by high stiffness and strength as well as a higher notched impact strength compared to a standard PA 6 GF 30. The material is therefore perfectly suitable for industrial applications and for housings and covers in the automotive industry.

Features

impact modified

Properties

Modulus

9.000 MPa

Strength

160 MPa

Impact

105 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

9000 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

160 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

4,5 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

7700 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

250 MPa

Flexural strain at break

ISO 178

2 mm/min | d.a.m.

4,5 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

105 kJ/m²

-30°C | d.a.m.

110 kJ/m²

Charpy notched impact strength	23°C d.a.m.	20 kJ/m²
ISO 179-1/1eA	-30°C d.a.m.	16 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A	1,8 MPa	205 °C
ISO 75		
Temperature of deflection under load HDT/C	8 MPa	145 °C
ISO 75		
Melting temperature	DSC, 10K/min	220 °C
ISO 11357-3		

Flammability

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

General Properties

Density	23°C	1,39 g/cm³
ISO 1183		
Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	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 ($\tau \leq -30^{\circ}\text{C}$)	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