

AKROMID®

A3 GF 13 S3 black (3768)

PA66-I GF13

AKROMID® A3 GF 13 S3 black (3768) is a 13% glass fiber reinforced, impact modified PA 6.6. It is characterised by a higher impact strength compared to standard glass fiber reinforced PA 6.6 and therefore perfectly suitable for technical applications in the mechanical engineering and automotive industry.

Features

impact modified

Properties

Modulus

5.200 MPa

Strength

125 MPa

Impact

75 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

5200 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

125 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

4 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

4800 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

180 MPa

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

75 kJ/m²

-30°C | d.a.m.

55 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

11 kJ/m²

-30°C | d.a.m.

6 kJ/m²

Thermal Properties

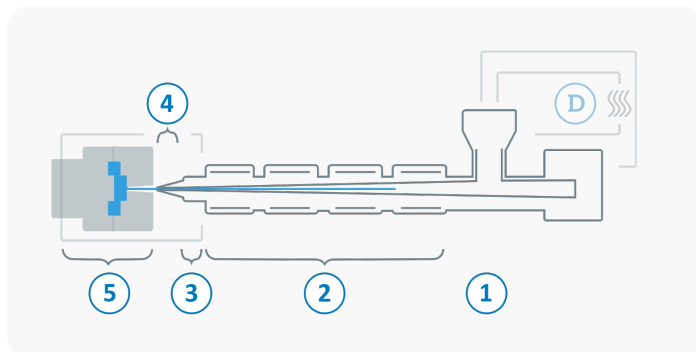
Temperature of deflection under load HDT/A ISO 75	1,8 MPa	244 °C
Temperature of deflection under load HDT/B ISO 75	0,45 MPa	261 °C
Melting temperature ISO 11357-3	DSC, 10K/min	260 °C

General Properties

Density ISO 1183	23°C	1,2 g/cm³
Molding shrinkage ISO 294-4	flow	0,3 %
	transverse	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 ($\tau \leq -30^{\circ}\text{C}$)	80 °C
	Processing moisture	0,02 - 0,1 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	260 - 300 °C
3	Nozzle temperature	270 - 310 °C
4	Melt temperature	280 - 300 °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