

AKROMID®

B3 GF 35 1 natural (2465)

PA6 GF35

AKROMID® B3 GF 35 1 natural (2465) is a 35% glass fiber reinforced polyamide 6. It is characterised by a high stiffness and strength. Furthermore, the material is heat stabilised and therefore perfectly suitable for technical parts in industrial engineering and in the automotive industry. The material has a light inherent color.

Features

heat stabilised 130

Properties



Mechanical Properties

Tensile modulus	1 mm/min d.a.m.	11500 MPa
ISO 527-2	1 mm/min conditioned	7300 MPa
Tensile stress at break	5 mm/min d.a.m.	195 MPa
ISO 527-2	5 mm/min conditioned	120 MPa
Tensile strain at break	5 mm/min d.a.m.	3 %
ISO 527-2	5 mm/min conditioned	5 %
Flexural modulus	2 mm/min d.a.m.	10000 MPa
ISO 178		
Flexural strength	2 mm/min d.a.m.	285 MPa
ISO 178		
Charpy impact strength	23°C d.a.m.	100 kJ/m²
ISO 179-1/1eU	23°C conditioned	110 kJ/m²
	-30°C d.a.m.	90 kJ/m²
Charpy notched impact strength	23°C d.a.m.	15 kJ/m²
ISO 179-1/1eA	23°C conditioned	21 kJ/m²
	-30°C d.a.m.	13 kJ/m²

Izod impact strength ISO 180/1A	23°C d.a.m.	85 kJ/m ²
Izod notched impact strength ISO 180/1A	23°C d.a.m.	20 kJ/m ²
Ball indentation hardness ISO 2039-1	961N/30s d.a.m.	240 MPa

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	215 °C
Temperature of deflection under load HDT/B ISO 75	0,45 MPa	220 °C
Temperature of deflection under load HDT/C ISO 75	8 MPa	165 °C
Melting temperature ISO 11357-3	DSC, 10K/min	220 °C

Flammability

Flammability UL 94	0,8 mm Wall thickness	HB Class
GWFI IEC 60695-2-12	1,6 mm Wall thickness	650 °C
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+

General Properties

Density ISO 1183	23°C	1,41 g/cm ³
Humidity absorption ISO 1110	70°C, 62% r.H.	1,8 - 2,1 %
Water absorption ISO 62	23°C, saturated	5,9 - 6,5 %

Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,5 - 0,7 %

Electrical Properties

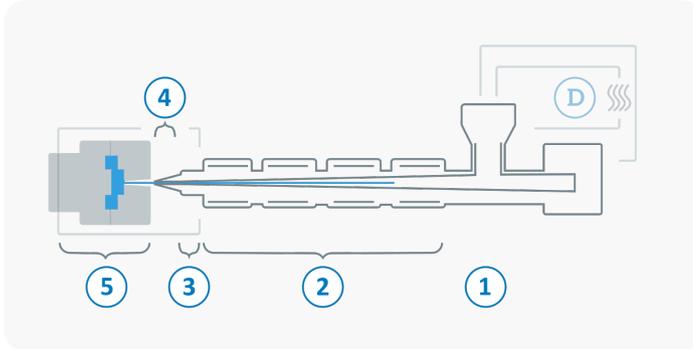
Volume resistivity	d.a.m.	$10^{13} \Omega \times \text{cm}$
IEC 62631-3-1	conditioned	$10^{10} \Omega \times \text{cm}$

Surface resistivity	d.a.m.	$10^{12} \Omega$
IEC 62631-3-2	conditioned	$10^{10} \Omega$

Comparative tracking index	Test liquid A	600 V
IEC 60112		

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