

### Datasheet

#### Description:

AKROMID® B3 GF 30 1 L black (4365) is a 30% glass fibre reinforced and heat stabilised polyamide-blend with a reduced density compared to standard PA6 GF 30

#### Applications

Technical components in the automotive and electronic industry, where a weight and cost reduction is required

Typical values	Test specification	Method	Unit	Value	
				d.a.m.	moist.*

### Mechanical Properties

Tensile modulus	1 mm/min	ISO 527-2	MPa	8800	6800
Stress at break	5 mm/min	ISO 527-2	MPa	140	105
Strain at break	5 mm/min	ISO 527-2	%	3	4,5
Flexural modulus	2 mm/min	ISO 178	MPa	8800	6200
Flexural strength	2 mm/min	ISO 178	MPa	215	155
Flexural strain at break	2 mm/min	ISO 178	%	3,2	4,4
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m <sup>2</sup>	70	67
Charpy impact strength	-30°C	ISO 179-1/1eU	kJ/m <sup>2</sup>	56	55
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m <sup>2</sup>	15	16
Charpy notched impact strength	-30°C	ISO 179-1/1eA	kJ/m <sup>2</sup>	15	13
Ball indentation hardness	358/30	ISO 2039-1	MPa	170	

### Electrical Properties

Comparative tracking index	test solution A	IEC 60112		600
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### Thermal Properties

Melting temperature	DSC, 10K/min	DIN EN 11357-1	°C	220
Temp. of deflection under load HDT/A	1,8 MPa	ISO 75	°C	200
Temp. of deflection under load HDT/B	0,45 MPa	ISO 75	°C	217
Coeff. of linear therm. expansion, parallel	23°C - 80°C	ISO 11359-1/2	1,0E-4/K	0,17
Coeff. of linear therm. expansion, normal	23°C - 80°C	ISO 11359-1/2	1,0E-4/K	1,34

### Flammability

Wall thickness			mm	0,4	0,8	1,6	2,0	3,2
Flammability		UL 94	class		HB			
GWFI		IEC 60695-2-12	°C		650			
GWIT		IEC 60695-2-13	°C		675			
Burning rate (< 100 mm/min)	> 1 mm thickness	FMVSS 302						+

### General Properties

Density	23°C	ISO 1183	g/cm <sup>3</sup>	1,26
Content reinforcement/Content Filler		ISO 1172	%	30
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	1,4

### Rheological Properties

MVR	275/5	ISO 1133	cm <sup>3</sup> /10min	11
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### Processing

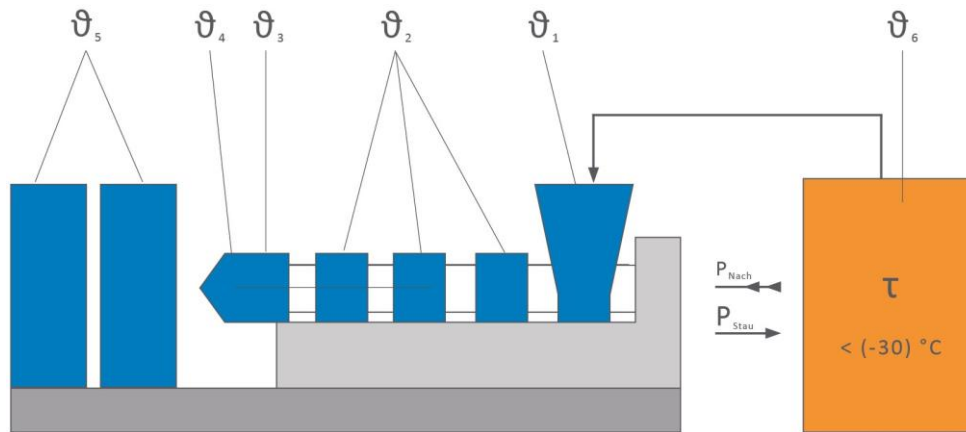
Flowability	7 x 3,5 mm & **	AKRO	mm	715
Molding shrinkage	flow	ISO 294-4	%	0,1 - 0,3
Molding shrinkage	transverse	ISO 294-4	%	0,5 - 0,7

\* = specimen acc. ISO 1110 stored

\*\* = mould temperature: 80°C, melt temperature: 270°C, injection pressure: 750 bar

### Continuation

### Processing recommendations



$\vartheta_6$	Drying time	h	0 - 4
$\vartheta_6$	Drying temperature	°C	80
	Processing moisture	%	0,02 - 0,1
$\vartheta_1$	Feed section	°C	60 - 80
$\vartheta_2$	Section 1 - Section 4	°C	220 - 290
$\vartheta_3$	Nozzle	°C	240 - 300
$\vartheta_4$	Melt	°C	240 - 290
$\vartheta_5$	Mould	°C	70 - 100
$P_{Nach}$	Holding pressure, spec.	bar	300 - 800
$P_{Stau}$	Back pressure, spez.	bar	50 - 150
	Injection speed		medium to high
	Screw speed	m/min	5 - 15

The listed values are recommendations. Higher values should be used for higher glass loadings. We recommend only de-humidifying or vacuum dryers. Extensive drying can cause filling problems and surface defects.