

## Datasheet

### Description:

AKROMID® B3 GF 25 1 L black (4637) is a 25% glass fibre reinforced and heat stabilised polyamide-blend with a reduced density compared to standard PA6 GF 25

### Applications

Mainly 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	7500	5600
Stress at break	5 mm/min	ISO 527-2	MPa	135	88
Strain at break	5 mm/min	ISO 527-2	%	3,3	4,5
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m <sup>2</sup>	68	58
Charpy impact strength	-30°C	ISO 179-1/1eU	kJ/m <sup>2</sup>	67	54
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m <sup>2</sup>	15	15
Charpy notched impact strength	-30°C	ISO 179-1/1eA	kJ/m <sup>2</sup>	13	10

### 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	198
Temp. of deflection under load HDT/B	0,45 MPa	ISO 75	°C	217

### 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		750	725		750
GWIT		IEC 60695-2-13	°C		775	750		775
Burning rate (< 100 mm/min)	> 1 mm thickness	FMVSS 302						+

### General Properties

Density	23°C	ISO 1183	g/cm <sup>3</sup>	1,22
Content reinforcement/Content Filler		ISO 1172	%	25
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	1,5

### Rheological Properties

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

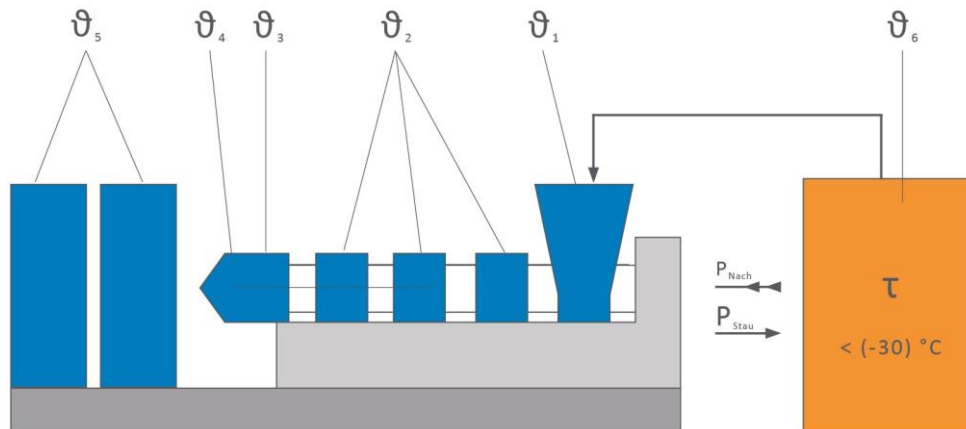
Flowability	7 x 3,5 mm & **	AKRO	mm	860
Molding shrinkage	flow	ISO 294-4	%	0,1 - 0,3
Molding shrinkage	transverse	ISO 294-4	%	0,55 - 0,75

\* = 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.