

## Datasheet

### Description:

AKROMID® B28 GF 30 S3 natural (4835) is a 30% glass fibre reinforced, dry impact resistant, easy flowing polyamide 6 with high stiffness and strength and light inherent color

### Applications

Housings and covers for the automotive industry and power tools

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

## Mechanical Properties

Tensile modulus	1 mm/min	ISO 527-2	MPa	9000	4900
Stress at break	5 mm/min	ISO 527-2	MPa	160	105
Strain at break	5 mm/min	ISO 527-2	%	4,5	10
Flexural modulus	2 mm/min	ISO 178	MPa	7500	
Flexural strength	2 mm/min	ISO 178	MPa	245	
Flexural strain at break	2 mm/min	ISO 178	%	5,5	
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m <sup>2</sup>	100	100
Charpy impact strength	-30°C	ISO 179-1/1eU	kJ/m <sup>2</sup>	110	
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m <sup>2</sup>	20	30
Charpy notched impact strength	-30°C	ISO 179-1/1eA	kJ/m <sup>2</sup>	15	

## 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	207	
Temp. of deflection under load HDT/B	0,45 MPa	ISO 75	°C	220	

## General Properties

Density	23°C	ISO 1183	g/cm <sup>3</sup>	1,3	
Content reinforcement/Content Filler		ISO 1172	%	30	
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	2,1	

## Rheological Properties

MVR	275/5	ISO 1133	cm <sup>3</sup> /10min	35	
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## Processing

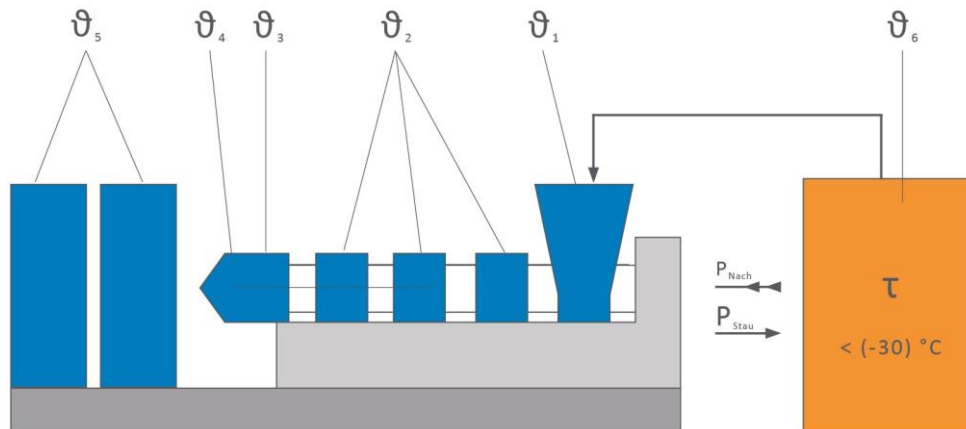
Flowability	8,4 x 1 mm & **	AKRO	mm	160	
Flowability	8,4 x 2 mm & **	AKRO	mm	480	
Flowability	7 x 3,5 mm & **	AKRO	mm	1220	
Molding shrinkage	flow	ISO 294-4	%	0,1 - 0,3	
Molding shrinkage	transverse	ISO 294-4	%	0,5 - 0,7	

\* = 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	240 - 290
$\vartheta_3$	Nozzle	°C	260 - 300
$\vartheta_4$	Melt	°C	270 - 290
$\vartheta_5$	Mould	°C	80 - 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	8 - 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.