

#### Datasheet

#### Description:

AKROMID® A3 GF 35 3 black (1802) is a 35% glass fibre reinforced, nucleated polyamide 6.6 with high stiffness and strength

#### Applications

Components in mechanical engineering and in the automotive industry

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

#### Mechanical Properties

Tensile modulus	1 mm/min	ISO 527-2	MPa	11500	8400
Stress at break	5 mm/min	ISO 527-2	MPa	180	120
Strain at break	5 mm/min	ISO 527-2	%	2,3	4,2
Flexural modulus	2 mm/min	ISO 178	MPa	8000	
Flexural strength	2 mm/min	ISO 178	MPa	250	
Flexural strain at break	2 mm/min	ISO 178	%	3,7	
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m <sup>2</sup>	50	> 55
Charpy impact strength	-30°C	ISO 179-1/1eU	kJ/m <sup>2</sup>	53	
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m <sup>2</sup>	9	13
Charpy notched impact strength	-30°C	ISO 179-1/1eA	kJ/m <sup>2</sup>	6	

#### Thermal Properties

Melting temperature	DSC, 10K/min	DIN EN 11357-1	°C	262
Temp. of deflection under load HDT/A	1,8 MPa	ISO 75	°C	250
Temp. of deflection under load HDT/B	0,45 MPa	ISO 75	°C	265

#### Flammability

Wall thickness			mm	0,4	0,8	1,6	2,0	3,2
Flammability		UL 94	class			HB		
Burning rate (< 100 mm/min)	> 1 mm thickness	FMVSS 302				+		

#### General Properties

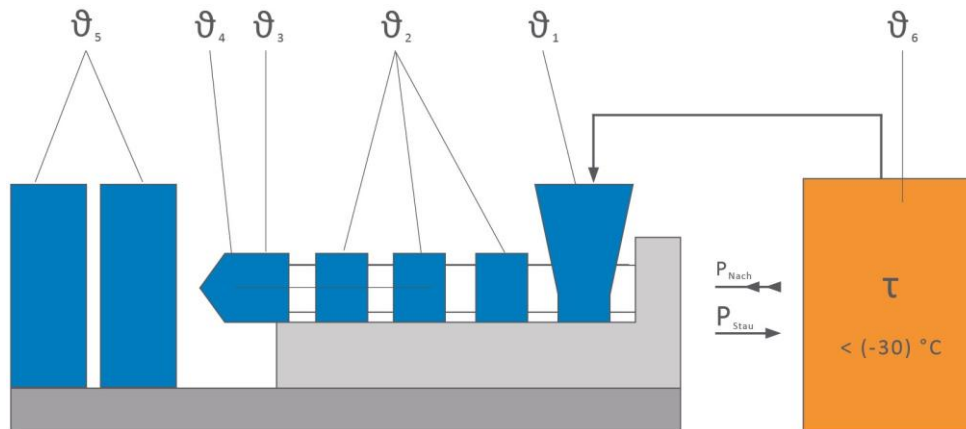
Density	23°C	ISO 1183	g/cm <sup>3</sup>	1,41
Content reinforcement/Content Filler		ISO 1172	%	35

#### Processing

Molding shrinkage	flow	ISO 294-4	%	0,1 - 0,3
Molding shrinkage	transverse	ISO 294-4	%	0,65 - 0,85

#### 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	260 - 300
$\vartheta_3$ Nozzle	°C	270 - 310
$\vartheta_4$ Melt	°C	280 - 300
$\vartheta_5$ 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.