

#### Preliminary Datasheet

##### Description:

AKROMID® A3 GF 13 S3 natural (2788) is a 13% glass fiber reinforced, dry impact resistant polyamide 6.6 with average stiffness and strength and light inherent color.

##### Applications

Components in mechanical engineering and in the automotive industry

Typical values	Test specification	Method	Unit	Value d.a.m.
----------------	--------------------	--------	------	-----------------

#### Mechanical Properties

Tensile modulus	1 mm/min	ISO 527-2	MPa	5200
Stress at break	5 mm/min	ISO 527-2	MPa	125
Strain at break	5 mm/min	ISO 527-2	%	4
Flexural modulus	2 mm/min	ISO 178	MPa	4800
Flexural strength	2 mm/min	ISO 178	MPa	180
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m <sup>2</sup>	75
Charpy impact strength	-30°C	ISO 179-1/1eU	kJ/m <sup>2</sup>	55
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m <sup>2</sup>	11
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	260
Temp. of deflection under load HDT/A	1,8 MPa	ISO 75	°C	245
Temp. of deflection under load HDT/B	0,45 MPa	ISO 75	°C	260

#### General Properties

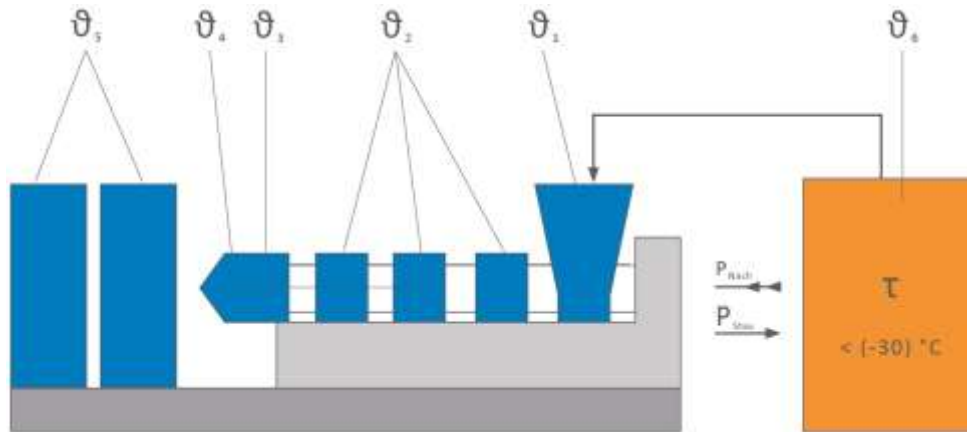
Density	23°C	ISO 1183	g/cm <sup>3</sup>	1,2
Content reinforcement/Content Filler		ISO 1172	%	13

#### Processing

Molding shrinkage	flow	ISO 294-4	%	0,3
Molding shrinkage	transverse	ISO 294-4	%	0,9

#### 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.