

Datasheet

Description:

AKROMID® A3 GF 15 1 GIT black (4620) is a 15% glass fibre reinforced, heat stabilised polyamide 6.6 with medium stiffness and strength for gas injection technology

Applications

Engineering parts, which are produced by gas injection technology. Furthermore A3 GF 15 1 GIT black (4620) can be used for standard injection moulding for demanding surface quality.

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

Mechanical Properties

Tensile modulus	1 mm/min	ISO 527-2	MPa	5500	3500
Stress at break	5 mm/min	ISO 527-2	MPa	125	80
Strain at break	5 mm/min	ISO 527-2	%	3	12
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m ²	40	75
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m ²	7	8

Thermal Properties

Melting temperature	DSC, 10K/min	DIN EN 11357-1	°C	255
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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 ³	1,24
Content reinforcement/Content Filler		ISO 1172	%	15
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	2,5

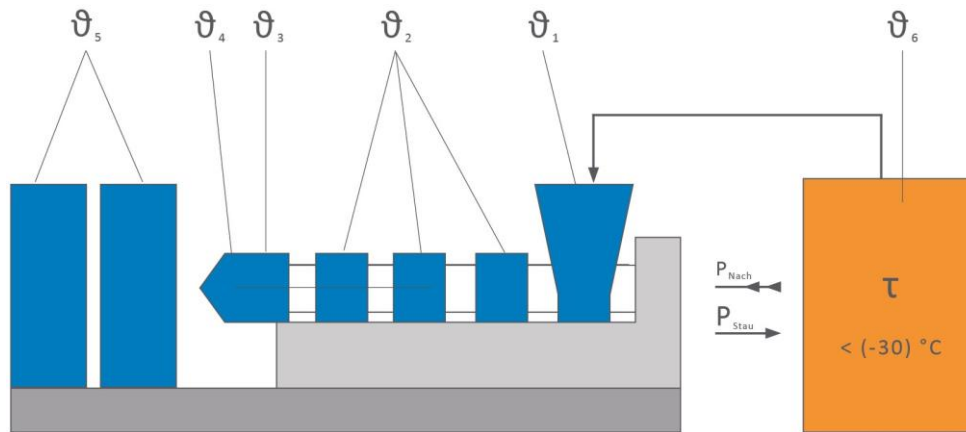
Processing

Molding shrinkage	flow	ISO 294-4	%	0,3 - 0,5
Molding shrinkage	transverse	ISO 294-4	%	0,9 - 1,1

* = specimen acc. ISO 1110 stored

Continuation

Processing recommendations



ϑ_6	Drying time	h	0 - 4
ϑ_6	Drying temperature	°C	80
	Processing moisture	%	0,02 - 0,1
ϑ_1	Feed section	°C	60 - 80
ϑ_2	Section 1 - Section 4	°C	260 - 300
ϑ_3	Nozzle	°C	270 - 310
ϑ_4	Melt	°C	280 - 300
ϑ_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.