

Preliminary Datasheet

Description:

AKROMID® A3 GF 30 1 L natural (4715) is a 30% glass fibre reinforced and heat stabilised polyamide-blend with a reduced density compared to standard PA6.6 GF30

Applications

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	8600	7500
Stress at break	5 mm/min	ISO 527-2	MPa	155	120
Strain at break	5 mm/min	ISO 527-2	%	3,2	4,1
Flexural modulus	2 mm/min	ISO 178	MPa	8500	7000
Flexural strength	2 mm/min	ISO 178	MPa	240	190
Flexural strain at break	2 mm/min	ISO 178	%	3,6	4,3
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m ²	77	
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m ²	13	

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	246
Temp. of deflection under load HDT/B	0,45 MPa	ISO 75	°C	260

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

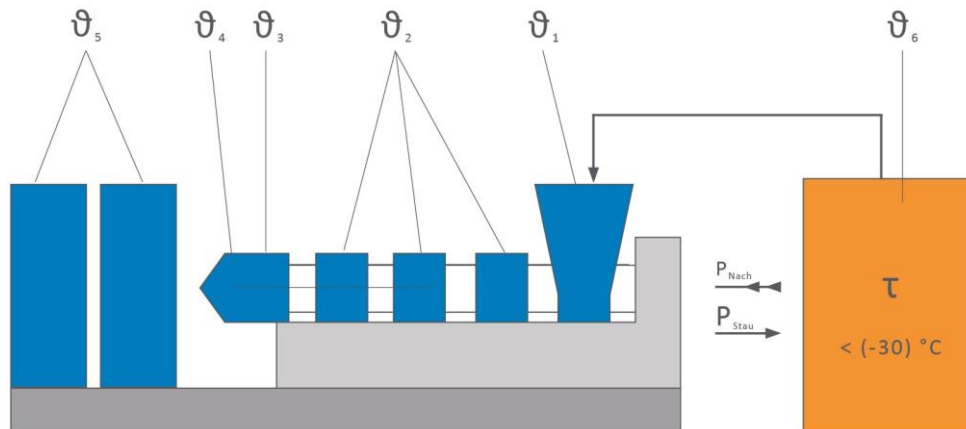
Density	23°C	ISO 1183	g/cm ³	1,26
Content reinforcement/Content Filler		ISO 1172	%	30
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	1,2

Rheological Properties

MVR	275/5	ISO 1133	cm ³ /10min	10
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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 - 300
ϑ_4	Melt	°C	270 - 300
ϑ_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.