

Datasheet

Description:

AKROMID® A28 GF 40 1 natural (4919) is a 40% glass fibre reinforced, heat stabilised, easy flowing polyamide 6.6 with average stiffness and strength and light inherent color

Applications

Components and housings mainly 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	13000	9800
Stress at break	5 mm/min	ISO 527-2	MPa	245	175
Strain at break	5 mm/min	ISO 527-2	%	3,0	4,0
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m ²	95	
Charpy impact strength	-30°C	ISO 179-1/1eU	kJ/m ²	80	
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m ²	17	
Charpy notched impact strength	-30°C	ISO 179-1/1eA	kJ/m ²	15	

Electrical Properties

Volume resistivity		IEC 60093	Ohm x cm	1,0E+13	1,0E+10
Surface resistivity		b.o. IEC 60093	Ohm	1,0E+12	1,0E+10
Comparative tracking index	test solution A	IEC 60112		600	

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	260	
Temp. of deflection under load HDT/B	0,45 MPa	ISO 75	°C	260	
Temp. of deflection under load HDT/C	8 MPa	ISO 75	°C	225	

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	1,46	
Content reinforcement/Content Filler		ISO 1172	%	40	

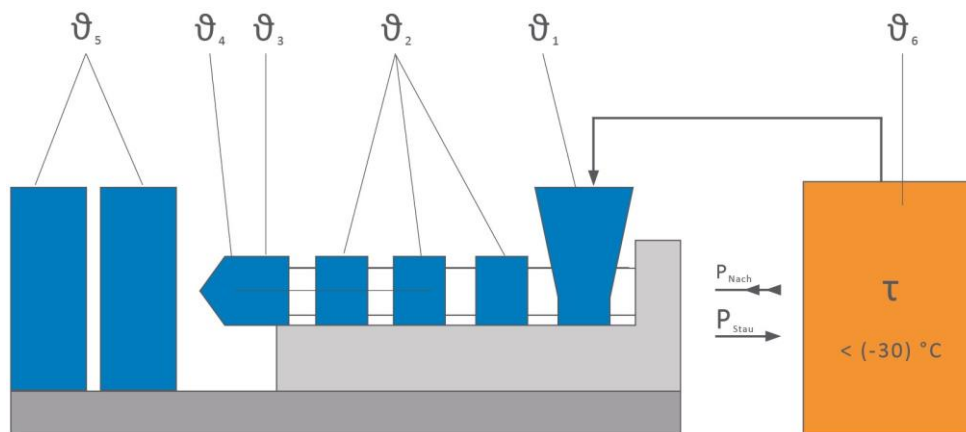
Processing

Flowability	7 x 3,5 mm & **	AKRO	mm	980	
Molding shrinkage	flow	ISO 294-4	%	0,4	
Molding shrinkage	transverse	ISO 294-4	%	0,8	

b.o.: based on

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.