

Datasheet

Description:

AKROMID® B3 GF 30 2 HU blue (5350) is a 30% glass fibre reinforced, UV- and heat stabilised, UL listed polyamide 6 with high rigidity and strength

Applications

Applications are mainly 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	10000	6000
Stress at break	5 mm/min	ISO 527-2	MPa	170	110
Strain at break	5 mm/min	ISO 527-2	%	3	5,5
Flexural modulus	2 mm/min	ISO 178	MPa	8500	
Flexural strength	2 mm/min	ISO 178	MPa	270	
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m ²	80	100
Ball indentation hardness	961/30	ISO 2039-1	MPa	230	

Electrical Properties

Volume resistivity		IEC 60093	Ohm x cm	1,0E+13	1,0E+10
Surface resistivity		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	220	
Temp. of deflection under load HDT/A	1,8 MPa	ISO 75	°C	210	
Temp. of deflection under load HDT/B	0,45 MPa	ISO 75	°C	220	
Temp. of deflection under load HDT/C	8 MPa	ISO 75	°C	150	

Flammability

Wall thickness			mm	0,4	0,8	1,6	2,0	3,2
Flammability		UL 94	class		HB			
GWFI		IEC 60695-2-12	°C			650		
Burning rate (< 100 mm/min)	> 1 mm thickness	FMVSS 302						+

General Properties

Density	23°C	ISO 1183	g/cm ³	1,36	
Content reinforcement/Content Filler		ISO 1172	%	30	
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	2,1 - 2,3	
Water absorption	23°C, saturated	ISO 62	%	6,3 - 6,9	

Processing

Flowability	7 x 3,5 mm & **	AKRO	mm	660	
Molding shrinkage	flow	ISO 294-4	%	0,3	
Molding shrinkage	transverse	ISO 294-4	%	0,7	

* = specimen acc. ISO 1110 stored

** = mould temperature: 80°C, melt temperature: 270°C, injection pressure: 750 bar