

Datasheet

Description:

AKROMID® B3 GK 50 natural (3690) is a 50% glass bead reinforced polyamide 6 with low warpage and high surface appearance and light inherent color

Applications

Applications are housings and covers in the automotive, electro and furniture industry.

Typical values	Test specification	Method	Unit	Value d.a.m.
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Mechanical Properties

Tensile modulus	1 mm/min	ISO 527-2	MPa	5700
Tensile stress at break	5 mm/min	ISO 527-2	MPa	75
Elongation at break	5 mm/min	ISO 527-2	%	4
Flexural modulus	2 mm/min	ISO 178	MPa	5200
Flexural strength	2 mm/min	ISO 178	MPa	135
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m ²	42
Charpy impact strength	-30°C	ISO 179-1/1eU	kJ/m ²	32
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m ²	3
Charpy notched impact strength	-30°C	ISO 179-1/1eA	kJ/m ²	1

Electrical Properties

Surface resistivity		IEC 60093	Ohm x cm	1,0E+15
Volume resistivity		IEC 60093	Ohm	1,0E+13
CTI	test solution A	IEC 60112		500

Thermal Properties

Melting Point	DSC, 10K/min	DIN EN 11357-1	°C	225
Heat distortion temperature HDT/A	1,8 MPa	ISO 75	°C	75
Heat distortion temperature HDT/B	0,45 MPa	ISO 75	°C	188

Flammability

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

General Properties

Density	23°C	ISO 1183	g/cm ³	1,54
Content reinforcement/Content Filler		ISO 1172	%	50
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	1,5
Water absorption	23°C, saturated	ISO 62	%	4,7

Processing

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