

Datasheet

Description:

AKROMID® B28 GM 10/20 1 LA black (4790) is a 10% glass fibre reinforced, 20% glass bead filled, heat stabilised, laser markable, easy flowing polyamide 6 with good surface and slight tendency to warp.

Applications

Application areas are housings, handles and switches in the automotive- and electrical industry

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

Mechanical Properties

Tensile modulus	1 mm/min	ISO 527-2	MPa	5700	3000
Tensile stress at break	5 mm/min	ISO 527-2	MPa	110	60
Elongation at break	5 mm/min	ISO 527-2	%	2,6	10
Flexural modulus	2 mm/min	ISO 178	MPa	5000	
Flexural strength	2 mm/min	ISO 178	MPa	170	
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m ²	30	80
Charpy impact strength	-30°C	ISO 179-1/1eU	kJ/m ²	30	
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m ²	4	7
Charpy notched impact strength	-30°C	ISO 179-1/1eA	kJ/m ²	4	

Electrical Properties

Surface resistivity		IEC 60093	Ohm	1,0E+5	
---------------------	--	-----------	-----	--------	--

Thermal Properties

Melting Point	DSC, 10K/min	DIN EN 11357-1	°C	222	
Heat distortion temperature HDT/A	1,8 MPa	ISO 75	°C	200	

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	1,35	
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	2,2	

Processing

Flowability	Flowspiral**	AKRO	mm	900	
Molding shrinkage	flow	ISO 294-4	%	0,5	
Molding shrinkage	transverse	ISO 294-4	%	0,9	

* = specimen acc. ISO 1110 stored

** = mould temperature: 80°C, melt temperature: 270°C, injection pressure: 750 bar, cross section of flow spiral: 7 mm x 3,5 mm