



La MISOLET

Working Of Electric And Thermo Insulating Materials

CNC machining by customers' drawing

Blanked findings

Direct selling

Sheets and panels – Rods – Tubes made of:

Bakelized Cloth and Bakelized Paper

Epoxy Glass Nema G10 and G11,

Silicone Nema G7 and Melamine Nema G5

Polyester Glass GPO3

Thermo Insulating Materials – Mica and Micanite

TOOLING, BLANKING AND DIEMAKING

DATA SHEET

Laminate:

LGPO

Description: Glass mat and antitracking polyester resin laminate

According to specifications	CEI 15/10	PV	Unit	Average values	Test method	Test conditions
	CEI EN 60893	UP GM 203				
	DIN 7735	Hm 2471				
	NEMA LI - 1	GPO3				
Physical properties	Colour			red or white		
	Specific gravity		g/cm ³	1,8	ISO 1183	a
	Water absorption mm 3		mg	55	IEC 60893-2	b + d
	Thermal classification		°C	F (155°C)	IEC 60216	-
	Self extinguishing			V0	UL 94	-
	Thickness ≥ 2,4					
	Thermal conductivity		W/mK	0,3	ISO 8302	-
	Expansion coefficient		10 ⁻⁶ /K	20	VDE 0304/VSM	-
	Silicone resin content		%	-	IEC 371-2	-
	Mica content		%	-	IEC 371-2	-
Mechanical properties	Flexural strength ⊥		MPa	130	ISO 178	a
	Charpy impact strength //		KJ/m ²	40	ISO 179	a
	Tensile strength		MPa	100	ISO 527	a
	Compressive strength ⊥		MPa	280	ISO 604	-
	Bonding strength //		N	5000	CEI	a
	Modulus of elasticity		MPa	10000	ISO 178	a
Dielectrical properties	Insulation resistance		MΩ	5x10 ²	ISO 60167	d
	Dielectric strength // to lamination		KV	35	ISO 60243-1	e
	Dielectric strength ⊥ to lamination		KV/mm	10	ISO 60243-1	e
	Tracking resistance		V	600	IEC 60112	a
	Arc resistance		S	180	ASTM D495	a
	Tracking and erosion resistance		Class	IB 2,5	IEC 60587	
	Dissipation factor at 1 MHz			0,05	IEC 60250	d
	Dielectric constant (permittivity) at 1 MHz			4,5	IEC 60250	d

Other information : the material is halogen free and flame retardant.

Low smoke emission and toxicity in case of fire according to EN 45545-2:2013 – R22:HL2 / R23:HL3

The values shown above are indicative as they represent the average values observed during our routine control tests.

The user must make sure that the product he requests is compatible with the use to which it is destined.

Test condition:

a) 48h 15-35°C 45/75 % relative humidity **b)** 1h 105°C **c)** 24h 105°C **d)** 24h 23°C in water

e) 48h 50°C in water **f)** 24h 120°C in oil **g)** 96h 45°C 95% relative humidity

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THICKNESS mm	TOLERANCE	Particular properties:	
0,8	± 0,23		- Good mechanical properties
1,0	± 0,23		- Suitable for punching up to and including 6 mm
1,5	± 0,25	- Good dielectric characteristics	
2,0	± 0,25		
2,5	± 0,30		
3,0	± 0,35		
4,0	± 0,35		
5,0	± 0,35		
6,0	± 0,40		
8,0	± 0,45		
10,0	± 0,50		
12,0	± 0,55		
15,0	± 0,75		
20,0	± 0,75		
25,0	± 0,85		
30,0	± 0,97		
35,0	± 1,10		
40,0	± 1,10		
50,0	± 1,25		
60,0	± 1,50		
-	-		
-	-		
-	-		
-	-		
-	-		
-	-		

TO BE KEPT in dry stores, in a horizontal position

We are available to effect cutting to measurement as well as machining to drawing of parts by CNC

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