



# 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:

**LTBF**

**Description:** Cotton fabric (24x24 ±2) and phenolic resin laminate

According to specifications	CEI 15/10	F	Unit	Average values	Test method	Test conditions
	CEI EN 60893	PF CC 201				
	DIN 7735	Hgw 2082				
	NEMA LI - 1	C				

Physical properties	Colour				
	Specific gravity	g/cm <sup>3</sup>	1,4	ISO 1183	a
	Water absorption mm 3	mg	249	IEC 60893-2	b + d
	Thermal classification	°C	E (120°C)	IEC 60216	-
	Self extinguishing		HB	UL 94	-
	Thermal conductivity	W/mK	0,2	ISO 8302	-
	Expansion coefficient	10 <sup>-6</sup> /K	18	VDE 0304/VSM	-
	Silicone resin content	%	-	IEC 371-2	-
	Mica content	%	-	IEC 371-2	-
<b>Mechanical properties</b>	Flexural strength ⊥	MPa	142	ISO 178	a
	Charpy impact strength	KJ/m <sup>2</sup>	9,7	ISO 179	a
	Tensile strength	MPa	83	ISO 527	a
	Compressive strength ⊥	MPa	329	ISO 604	a
	Bonding strength //	N	7000	CEI	a
	Modulus of elasticity	MPa	7000	ISO 178	a
<b>Dielectrical properties</b>	Insulation resistance	MΩ	1	ISO 60167	d
	Breakdown voltage	KV	2	ISO 60243-1	a
	Dielectric strength ⊥ to lamination	KV/mm	0,6	ISO 60243-1	a
	Tracking resi stance	V	-	IEC 60112	-
	Arc resistance	S	-	ASTM D495	-
	Dissipation factor at 1 MHz		-	IEC 60250	-
	Dielectric constant (permittivity) at 1 MHz		-	IEC 60250	-

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:
0,5	± 0,13	- Suitable for small gears and other fine machining applications
0,8	± 0,15	
1,0	± 0,16	- Suitable for low tension electric applications
1,2	± 0,17	
1,5	± 0,19	
2,0	± 0,21	
2,5	± 0,24	
3,0	± 0,26	
4,0	± 0,32	
5,0	± 0,36	
6,0	± 0,40	
8,0	± 0,49	
10,0	± 0,56	
12,0	± 0,64	
15,0	± 0,76	
18,0	± 0,80	
20,0	± 0,87	
25,0	± 1,02	
30,0	± 1,12	
35,0	± 1,24	
40,0	± 1,35	
45,0	± 1,45	
50,0	± 1,55	
60,0	± 1,75	
80,0	± 2,15	
90,0	± 2,35	

TO BE KEPT in dry stores, in a horizontal position

CAUTION: this material is photosensitive, light can gradually change the shade of colour.

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

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