



# 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, Micanite  
TOOLING, BLANKING AND DIEMAKING

## DATA SHEET

Laminate: **LG11**

**Description:** Glass cloth and epoxy resin binder laminate for high temperatures

According to specifications	CEI 15/10	EV	Unit	Average values	Test method	Test conditions
	CEI EN 60893	EP GC 203				
	DIN 7735	Hgw 2372.4				
	NEMA LI - 1	G11				

Physical properties	Colour	translucid natural			
	Specific gravity	g/cm <sup>3</sup>	1,9	ISO 1183	a
	Water absorption mm 3	mg	22	IEC 60893-2	b + d
	Thermal classification	°C	F (155°C)	IEC 60216	-
	Self extinguishing		-	UL 94	-
	Thermal conductivity	W/mK	0,3	ISO 8302	-
	Expansion coefficient	10 <sup>-6</sup> /K	15	VDE 0304/VSM	-
	Silicone resin content	%	-	IEC 371-2	-
	Mica content	%	-	IEC 371-2	-
Mechanical properties	Flexural strength ⊥	MPa	485	ISO 178	a
	Charpy impact strength //	KJ/m <sup>2</sup>	86	ISO 179	a
	Tensile strength	MPa	370	ISO 527	a
	Compressive strength ⊥	MPa	557	ISO 604	-
	Bonding strength //	N	8000	CEI	a
	Modulus of elasticity	MPa	24000	ISO 178	a
Dielectrical properties	Insulation resistance	MΩ	5x10 <sup>4</sup>	ISO 60167	d
	Breakdown voltage	KV	35	ISO 60243-1	e
	Dielectric strength ⊥ to lamination	KV/mm	14,7	ISO 60243-1	e
	Tracking resi stance	V	180	IEC 60112	a
	Arc resistance	S	-	ASTM D495	-
	Dissipation factor at 1 MHz		0,04	IEC 60250	d
	Dielectric constant (permittivity) at 1 MHz		5	IEC 60250	d

We inform you that the data reported on the data sheet are provided to the end user for the sole purpose of providing a range of parameters in order to assess the hypothetical suitability of the product to the actual use of the same, therefore to be considered indicative as they represent average values from laboratory tests. **The user must then test the product to determine its properties and its suitability for its intended use.**

Misolet s.r.l expressly disclaims all liability for any damage, injury and costs to persons and/or property, arising directly or indirectly from the use of the product that has not been preceded by tests with respect to the conditions of use to which the same will be intended. The data contained in this data sheet does not constitute a guarantee of any kind, express or implied, including any suitability for a particular use or purpose.

### 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

(Page 1 of 2)



# 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, Micanite  
TOOLING, BLANKING AND DIEMAKING

Laminate:

LG11

THICKNESS mm	TOLERANCE	Particular properties:
0,3	± 0,10	Low water absorption Good dielectric properties Excellent mechanical properties at high temperatures Applications: similar to LG10
0,5	± 0,12	
0,8	± 0,16	
1,0	± 0,18	
1,5	± 0,24	
2,0	± 0,28	
2,5	± 0,33	
3,0	± 0,37	
4,0	± 0,45	
5,0	± 0,52	
6,0	± 0,60	
8,0	± 0,72	
10,0	± 0,82	
12,0	± 0,94	
15,0	± 1,02	
20,0	± 1,30	
25,0	± 1,50	
30,0	± 1,70	
35,0	± 1,95	
40,0	± 2,10	
50,0	± 2,45	
60,0	± 2,80	
-	-	

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

Ref. 216.8623-A1-120928; 217.0023-180810;  
Ed. July 2021

(Page 2 of 2)