

### DATA SHEET

Laminate:

**LTFE**

**Description:** Cotton fabric (36x36 ±2) and phenolic resin laminate

According to specifications	CEI 15/10	FF	Unit	Average values	Test method	Test conditions
	CEI EN 60893	PF CC 203				
	DIN 7735	Hgw 2083				
	NEMA LI - 1	L				

Physical properties	Colour		Unit	Average values	Test method	Test conditions
	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	-
Mechanical properties	Flexural strength ⊥	MPa		158	ISO 178	a
	Charpy impact strength	KJ/m <sup>2</sup>		11,3	ISO 179	a
	Tensile strength	MPa		102	ISO 527	a
	Compressive strength ⊥	MPa		342	ISO 604	a
	Bonding strength //	N		7000	CEI	a
	Modulus of elasticity	MPa		7000	ISO 178	a
Dielectrical properties	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	-

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

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Laminate:

**LTFF**

La MISOLET



THICKNESS mm	TOLERANCE	Particular properties:
0,5	± 0,13	- Suitable for punching
0,6	± 0,14	- Used for fine machining applications
0,8	± 0,15	
1,0	± 0,16	
1,2	± 0,17	
1,5	± 0,19	
2,0	± 0,21	
2,5	± 0,24	
3,0	± 0,26	
3,5	± 0,28	
4,0	± 0,32	
5,0	± 0,36	
6,0	± 0,40	
8,0	± 0,49	
10,0	± 0,56	
12,0	± 0,64	
14,0	± 0,70	
16,0	± 0,76	
18,0	± 0,81	
20,0	± 0,87	
25,0	± 1,02	
-	-	
-	-	
-	-	
-	-	

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

Ref.217.798-100218; 216.8623-150706;

Ed. July 2021

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