

## M30

## SHEET

**Composite:** glass cloth – melamine resin

**Color:** white

**Standards:** IEC 893            MFGC201  
DIN 7735            Hgw 2272  
NEMA LI1            G5

### CHARACTERISTIC AND APPLICATIONS

Composite with good mechanical and dielectric properties , in particular for its track resistance, electric arc resistance and fire resistance, self-extinguishing class v0. Lowest thickness sheets are suitable for punching..

#### Mechanical properties

<b>Flexural strenght</b>	(ISO 178)	250 MPa
<b>Modulus of elasticity</b>	(ISO 178)	20000 MPa
<b>Compressive strenght</b>	(ISO 604)	275 MPa
<b>Izod impact strenght</b>	(ISO 108)	50 kJ/m <sup>2</sup>
<b>Tensile strenght</b>	(ISO 527)	170 MPa

#### Electrical Properties

<b>Electrical strenght at 90°C,in oil, perpendicular to lamination</b>	(IEC 243-1)	7 kV/mm	(2 mm)
<b>Break down voltage, at 90°C in oil, parallel to laminations</b>	(IEC 243-1)	20 kV	
<b>Permittivity at 48-62 Hz</b>	(IEC 250)	7,5	
<b>Dissipation factor at 48-62 Hz</b>	(IEC 250)	0,02	

<b>Comparative tracking index</b>	(IEC 60112)	>600 V	
<b>Dry arc resistance</b>	(ASTM D495)	>180 sec.	

## Physical and thermal properties

<b>Density</b>	(ISO 1183)	1,9-2,0 gr/cc
<b>Water absorption</b>	(ISO 62)	180 mg
<b>thermal conductivity</b>	(ISO 8302)	0,3 W/mK
<b>linear expansion coefficient</b>	(VDE 0304/2)	10-20 $10^{-6} K^{-1}$
<b>Max working temperature</b>	(ISO 11357-2)	130°C
<b>Insulating class</b>	(CEI)	B
<b>Flammability</b>	(UL94)	V0

Note: Above listed features are the result of tests performed in FILP internal laboratory and on products obtained from current production. Deviations from average values on these material may normally occur. Suggestion and indications to final user are provided just to draw user's attention to check the product features on his own. User has to test the product to determine its suitability to the required application.

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