

Etronax MF G - Sheet

Components: Cotton fabric - Phenol
Colour*: ● Black
Serial no.: 224
Version no.: V1.0-17/06/15

Closest relevant standards

IEC 60893:
DIN 7735: -
NEMA LI 1: -

Mechanical properties	Test method	Thickness	Value	Unit	
Bending strength at RT	ISO 178	≥ 1,5 mm	135	MPa	*1
Bending strength at a high temperature	ISO 178	≥ 1,5 mm	-	MPa	-
Modulus of elasticity	ISO 178	≥ 1,5 mm	7000	MPa	*1
Compressive strength	ISO 604	≥ 5 mm	330	MPa	*1
Izod impact strength, parallel with layers	ISO 180/2A	≥ 5 mm	10	Kj/m ²	*1
Shearing strength, parallel	ISO 60893-2	≥ 5 mm	50	MPa	*1
Tensile strength	ISO 527	≥ 1,6 mm	80	MPa	*1

Electrical properties	Test method	Thickness	Value	Unit	
Electrical strength in oil at 90°C, perpendicular	IEC 60243-1	3 mm	-	kV/mm	-
Electrical strength in oil at 90°C, parallel	IEC 60243-1	≥ 3 mm	-	kV/25mm	-
Permittivity 50 MHz	IEC 62631-2-1	≤ 3 mm	-		-
Permittivity 1 MHz	IEC 62631-2-1	≤ 3 mm	-		-
Dissipation factor 50 MHz	IEC 62631-2-1	≤ 3 mm	-		-
Dissipation factor 1 MHz	IEC 62631-2-1	≤ 3 mm	-		-
Insulation resistance after submersion in water	IEC 62631-3-3	All	-	MΩ	-
Comparative tracking index	IEC 60112	≥ 3 mm	-	CTI	-

Conditioning

- 24h/23°C/50%RH
- 24h/23°C/50%RH + 1h/ in oil at 90°C
- 96h/105°C + 1h/23°C/20%RH
- 24h/50°C/<20% RH + 24h in water at 23°C
- 96h/105°C + 1h/ in oil at 90°C

Notes

- 1h/130°C / measured at 130°C
- 1h/150°C / measured at 150°C
- Halogen free
- 1h/180°C / measured at 180°C
- 1h/200°C / measured at 200°C

The above values are average values resulting from extensive tests in our laboratories. ELEKTRO-ISOLA A/S disclaims any and all liability for the performance of our materials in applications outside our control. Elektro-Isola A/S reserves the right to modify the above data without notice or further information. Furthermore, we refer to our general disclaimer.

* Note that color and surface are indicative. As this is a technical product, colour and expression may vary according to dimensions, batches and machining. If you want further information or have special decorative needs, please feel free to contact us.

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Physical and thermal properties	Test method	Thickness	Value	Unit	
Temperature index 20,000 h (T.I.)	IEC 60216	≥ 3 mm	100	°C	-
Fire class	IEC 60695-11-10	-	-	-	-
Density	ISO 1183-A	All	1.35	g/cm ³	-
Water absorption	ISO 62-1	50x50x3 mm	120	mg	-
Smoke emission & toxicity	EN 45545-2; R22, R23 & R24	-	-	-	-
Oxygen Index (OI)	EN ISO 4589-2	-	-	%	-
Smoke density (Ds max)	EN ISO 5659-2	-	-	-	-
Smoke density (Ds max)	EN ISO 5659-2	-	-	-	-
Toxicity (CIT _{NLP})	NF X70-100-1/-2	-	-	-	-

Characteristics and applications

Particularly suitable for mechanical applications. Shockproof, hard-wearing and noise-reducing material. The graphite content of the material results in low friction. Suitable as construction element where the requirements for high mechanical strength and wear resistance are strict. Good wear resistance properties in aggressive and dusty environments. Can be lubricated with water, oil or grease. Alternative to materials containing asbestos.

Conditioning

1	24h/23°C/50%RH
2	24h/23°C/50%RH + 1h/ in oil at 90°C
3	96h/105°C + 1h/23°C/20%RH
4	24h/50°C/<20% RH + 24h in water at 23°C
5	96h/105°C + 1h/ in oil at 90°C

Notes

A	1h/130°C / measured at 130°C
B	1h/150°C / measured at 150°C
C	Halogen free
D	1h/180°C / measured at 180°C
E	1h/200°C / measured at 200°C

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