


Etronit B 65 - Tubes

Components:	Paper - Phenol
Colour*:	 Brown
Serial no.:	650
Version no.:	V1.0-17/06/15

Closest relevant standards

IEC/EN 61212-3-1:	PF CP 21
DIN 7735:	Hp 2065
NEMA LJ 1:	XX

Mechanical properties	Test method	Dimension	Value	Unit	
Bending strength	ISO 178	id>100 mm	130	MPa	*1
Compressive strength, axial	ISO 604		140	MPa	*1
Cohesion between layers	IEC 61212-2	id<100 mm	160	MPa	*1

Electrical properties	Test method	Thickness	Value	Unit	
Electrical strength in oil at 90°C, perpendicular	IEC 60243-1	B) 3 mm	8.3	kV/mm	*2
Electrical strength in oil at 90°C, parallel	IEC 60243-1	B) ≥ 3 mm	25	kV/25mm	*2
Permittivity 50 MHz	IEC 62631-2-1		5		*3
Permittivity 1 MHz	IEC 62631-2-1		-		-
Dissipation factor 50 MHz	IEC 62631-2-1		0.04		*3
Dissipation factor 1 MHz	IEC 62631-2-1		-		-
Insulation resistance after submersion in water	IEC 62631-3-3		10	MΩ	*4
Comparative tracking index	IEC 60112	≥ 3 mm	-	CTI	-

Physical and thermal properties	Test method	Thickness	Value	Unit	
Temperature index 20,000 h (T.I.)	IEC 60216	≥ 3 mm	120	°C	*F
Fire class	IEC 60695-11-10	-	-	-	-
Density	ISO 1183-A	All	1.25	g/cm ³	-
Water absorption	ISO 62-1		4.5	mg/cm ²	-
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	-	-	-	-
Toxicity (CIT _{G, 8 min})	EN 17084	-	-	-	-

Characteristics and applications

For mechanical and electrical applications in low-voltage constructions. Good electrical properties at normal relative humidity. Also used as winding tubes in the film and metal foil industry. Supporting tubes for sanding brushes.

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	ID > 8 mm and/or OD > 10 mm
B	Wall thickness
C	Halogen free
D	230 MPa measured at 150°C
E	Wall thickness ≥ 4,0 mm
F	Tested on sheet material

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.