

INBORD[®] E-GS

Composition

Phenol / melamine laminate, reinforced with layers of glass cloth, having a tracking resistant decorative surface.

Properties

Due to layers of glass cloth INBORD[®] E-GS has improved mechanical properties compared with standard paper based laminate. The values of dielectric strength are similar to PFCP according IEC 60893 and HP 2061.6 acc. DIN 7735. The melamine surface gives an excellent tracking resistance and does not fade during exposure to light.

INBORD[®] E-GS is available in different surface colours.

Application

INBORD[®] E-GS is used as insulating construction material as cell partition for medium and high voltage switchgears. The improved mechanical strength provides more safety against burst in case of short circuit.

All information given here is based on currently available facts and on the results of experiments performed with all due care in our laboratories. It does not in any way reduce the responsibility of the user for carrying out further tests in order to ensure successful processing and use in specific applications. ISOVOLTA AG A-2355 Wiener Neudorf Tel: +43/5/9595-9407 Fax: +43/5/9595-9403 rigid-laminates@isovolta.com www.isovolta.com & *Censtantia* INDUSTRIES Company



Rigid Laminates

Technical Data

Properties	Testmethod	Unit	Value
Density	ISO 1183/A	g/cm³	approx. 1.45
Flexural strength	ISO 178	MPa	200
Flexural modulus of elasticity	ISO 178	MPa	15000
Compressive strength perpendicular to laminations	ISO 604	MPa	300
Impact strength parallel to laminations an15	DIN 53453	kJ/m²	20
Tensile strength	ISO 527	MPa	140
Electric strength at 23°C in oil perpendicular to laminations (thickness 3mm)	IEC 243	kV/mm	10
Breakdown voltage at 90°C in oil parallel to laminations	IEC 243	kV	30
Permittivity at 50 Hz	IEC 250	-	approx. 5
Dissipation factor at 50 Hz and 1 MHz	IEC 250	-	< 0,08
Insulation resistance after immersion in water	IEC 167	Ohm	> 10 ⁹
Comparative tracking index (on surface)	IEC 112	-	CTI 600
Thermal endurance	IEC 216	T.I.	120
Water absorption (thickness 10 mm)	ISO 62 / 1	mg	< 200
Flammability (thickness 8 mm and above)	UL 94	-	V0

Availability

Thickness:4 - 20 mmThickness tolerance:acc. IEC 60893 (as PF CP 201)Sheetsize:2800 x 1300 mm (mat surface)Other sheetsize upon request

tolerance: +30/-0 mm

Colour:

741 uni birch grey76 uni ligth greyOther colours upon request.

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