# uki is one of Europe's largest suppliers of electrical insulation materials and flexible films

## **UK Insulations Product Information**

## Elephantide Polyester Laminates

### **DESCRIPTION**

The Elephantide/Polyester range of combined flexible materials are produced by laminating various thicknesses of Elephatide Grade 4 blue cotton based presspaper to 0.023mm and 0.050mm thick PET (Polyester) film.

The cotton based presspaper exhibits a higher degree of flexibility and crease resistance to conventional Kraft based presspapers.

Laminating with PET film results in a combined material with enhanced electrical and mechanical characteristics.

Elephantide/Polyester combined flexible materials will slowly embrittle at temperatures over 100°C, but have the ability to withstand short-term temperatures up to 180°C and hence can give adequate service performance in a variety of applications at 130 deg C (class B) temperatures.

Elephantide/polyester combined flexible materials comply with international standard IEC 626-2.

#### **PROPERTIES**

High tear strength High inter-laminar shear strength High flexibility Insulations Class B (130 deg C) High flexibility Good electrical and mechanical properties

Grade	Nominal	Tolerance	Area	Elephatide	PET Film	Standard	Tensile	Elongation	Elec. Strengt
Combination	Thickness	±	Weight	®	Thickness	Widths	Strength	Longitudin	h
Thou	mm	%	g/m²	Thickness	mm	mm/%	N/10 mm	al	50Hz rapid
5/1	0.16	15	190	0.13	0.023	845 ±10	> 120	3	6 kV min
7/1	0.21	15	250	0.18	0.023	845 ±10	> 150	5	6 kV min
10/1	0.28	10	325	0.25	0.023	845 ±10	> 200	5	6 kV min
12/1	0.33	10	390	0.30	0.023	845 ±10	> 230	5	6 kV min
16/1	0.43	10	485	0.40	0.023	845 ±10	> 300	5	6 kV min
20/1	0.53	10	600	0.50	0.023	845 ±10	> 400	5	6 kV min
5/2	0.19	15	230	0.13	0.050	845 ±10	> 130	3	8 kV min
7/2	0.24	10	285	0.18	0.050	845 ±10	> 180	5	8 kV min
10/2	0.31	10	365	0.25	0.050	845 ±10	> 225	5	8 kV min
12/2	0.36	10	430	0.30	0.050	845 ±10	> 280	5	8 kV min
16/2	0.46	10	525	0.40	0.050	845 ±10	> 360	5	8 kV min