



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

**UK Insulations
Product Information**

Elephantide Grade 4

DESCRIPTION

Elephantide Grade 4 consists of blue cotton (rag) material. Grade 4 has proved to be one of the most successful electrical presspapers available and has been continually produced for over 60 years.

Grade 4 exhibits a unique combination of electrical strength, mechanical toughness and flexibility and has proven durability, even under the most arduous conditions.

MANUFACTURING PROCESS

The furnish is made up of 100% new cotton threads, which are mechanically and hydraulically processed before forming on a multi-cylinder machine.

Continuous improvements have been made by taking advantage of better raw material sources and modern developments in processing techniques.

APPLICATIONS

Grade 4 is most frequently used as transformer insulation in its pure form, but when laminated to polyester film, Grade 4 is also used as motor slot and overhang insulation in Class E (120°C) rotating machines, as well as a wide variety of other electrical, domestic and industrial appliances.

Physical Properties	Unit	Values
Appar ent density	g/ cm ³	1.05 - 1.20
Tensile str ength - MD	N/ mm ²	75 - 90
Tensile str ength - CMD	N/ mm ²	32 - 43
Conductivity	mS/ m	2.5 - 5.0
pH of aqueous ex tr act	pH	7.5 - 8.0
Ash content	%	0.20 - 0.35
Standar ds		BS EN 60641 Part 4.1A
Standar d width	mm	845, or slit tapes 10mm wide+
Colour		Blue

Electrical Strength	Unit	In Air	In Oil
0.127mm ±10%	kV/mm	14	74 - 78
0.18mm ± 10%	kV/mm	14.5	70 - 88
0.25mm ±10%	kV/mm	13.5	68 - 77
0.30mm 10%	kV/mm	12	60 - 74
0.40mm ± 10%	kV/mm	10.5	52 - 63
0.50mm ±10%	kV/mm	10.5	50 - 53
0.80mm* ±10%	kV/mm	/	/
1.00mm* ±10%	kV/mm	/	/

