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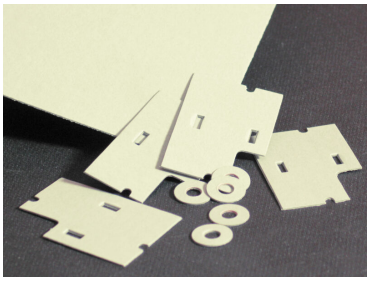
VULCANIZED PAPERS

NOMEX 410



Description

Designed as an electric insulation, the Nomex 410 is a synthetic paper that presents a good dielectric strength. It is compatible with all classes of resins, varnishes, glues, transformer liquids, lubricating oils and usual refrigeration agents. The Nomex 410 can be used in a majority of electrical equipment application. This vulcanised paper is available in many thisckness and dimensions. We can also cut the material according to your specifications.

Applications

The Nomex 410 is used in almost every electrical sheet insulation application. Its application scope extends from DC to AC motors and generators, and also dry and oil cooled transformers.

Specifications

Electrical properties

Dielectric resistance - AC rapid rise (ASTM D-149) Thickness of 0.25mm (0.010")	32 kV/mm
Dielectric resistance - AC rapid rise (ASTM D-149) Thickness of 0.38mm (0.015")	33 kV/mm
Dielectric resistance - Full wave impulse (ASTM D-3426) Thickness of 0.25mm (0.010")	63 kV/mm
Dielectric resistance - Full wave impulse (ASTM D-3426) Thickness of 0.38mm (0.015")	55 kV/mm

N.B. The information presented may differ from practice. We recommend conducting tests according to the conditions of use. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products. The data is subject to certain variations without notice.

Mechanical properties

Weight Thickness of 0.25mm (0.010")	249 g/m²
Weight Thickness of 0.38mm (0.015")	397 g/m²
Density (g/cc) Thickness of 0.25mm (0.010")	0.96
Density (g/cc) Thickness of 0.38mm (0.015")	1.03
Tensile strength (N/cm) Thickness of 0.25mm (0.010")	Machine direction: 285, Cross direction: 152
Tensile strength (N/cm) Thickness of 0.38mm (0.015")	Machine direction: 459, Cross direction: 252
Elongation (%) Thickness of 0.25mm (0.010")	Machine direction: 19, Cross direction: 15
Elongation (%) Thickness of 0.38mm (0.015")	Machine direction: 19, Cross direction: 14
Elmendorf tear (N) Thickness of 0.25mm (0.010")	Machine direction: 6.0, Cross direction: 10.8
Elmendorf tear (N) Thickness of 0.38mm (0.015")	Machine direction: 9.5, Cross direction: 17.2
Tear strenght (N) ASTM D-1004 Thickness of 0.25mm (0.010")	Machine direction: 71, Cross direction: 42
Tear strenght (N) ASTM D-1004 Thickness of 0.38mm (0.015")	Machine direction: 116, Cross direction: 74
Shrinkage at 300°C (%) Thickness of 0.25mm (0.010")	Machine direction: 0.4, Cross direction: 0.1
Shrinkage at 300°C (%) Thickness of 0.38mm (0.015")	Machine direction: 0.3, Cross direction: 0.2

Thermal Properties

Thermal conductivity at 150°C (mWatt/mK) Thickness of 0.25mm (0.010")	139
Thermal conductivity at 150°C (mWatt/mK) Thickness of 0.38mm (0.015")	149

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