



HSM Wire International, Inc

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2009 Epoxy-micapaper-PEPT-film-tape

Technical Information Single Conductor and Cable Insulation

Composition

CONDUCTOFOL® 2009 consists of mica paper based on calcined muscovite impregnated with a bishenol A resin, and a PETP-film as a carrier

Properties

The composite of mica paper and polyester film guarantees a high breakdown voltage and good elasticity. The thermal endurance to IEC 216 is rated at a minimum of 170°C and, by virtue of the high mica content of 60% and the specially epoxy resin, good tracking resistance and extraordinary radiation and corona resistance is achieved.

CONDUCTOFOL® 2009 remains flexible after thermal treatment. This permits coils to be formed and shaped with our risking damage to the conductor insulation, even after preconsolidation of the straight part and after pressing the main insulation.

Application

CONDUCTOFOL® 2009 is used for the insulation of rectangular copper conductors of low and high voltage machines. Due to the high tensile strength and good elongation CONDUCTOFOL® 2009 permits high speed wrapping of rectangular copper by conventional taping machines. The tape does not need to be heated or specially bonded to the copper in any way. Only the ends have to be fixed by an adhesive tape.

The number of layers of tape and the method of application needs to be chosen to suit the particular end use. For instance, two third overlapped or two half overlapped layers are commonly used for 6,6 kV and 11 kV machines respectively.

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Technical Data

Properties	Test Method	Unit	Value
Nominal Thickness		mm	0.09
Tolerance	IEC 371-2	mm	± 0.01
Thickness after pressing		mm	0.06 ± 0.015
Total Substance	IEC 371-2	g/m	129 ± 10
Mica Paper	IEC 371-2	g/m	75 ± 3
PETP-film	IEC 371-2	g/m	42 ± 4
Resin content	IEC 371-2	g/m	12 ± 3
Breakdown Voltage	IEC 371-2	kV	≥ 7
Tensile Strength	IEC 371-2	n/10mm	≥ 20
Stiffness 25°C	IEC 371-2	n/m	≤ 30
Thermal Rating Class	IEC 216		F (155°C)

Shelf life

min. 12 months at 20°C

min 24 months at 5°C

Availability

Rolls max. Width 1020mm. Tapes from 6 mm width upwards, standard widths 9, 12, 15, 20 mm

Contact our office for more information on mica paper.