FACT SHEET

ICT-FPFIM-9014

formerly ICT-NOMEX

ICT-NOM-410 is a synthetic aromatic polyamide polymer (aramid), which is characterized by a particularly stable molecular structure. This results in the excellent dielectric, thermal, chemical and mechanical properties of NOMEX® and opens up a wide range of applications for NOMEX® products. ICT-NOM-410 is produced by the manufacturer DUPONT under the name NOMEX®.

9 FOILS, SHEETS

DESCRIPTION

For more than four decades, NOMEX® papers and pressboards from the manufacturer DUPONT have been successfully used as surface insulating materials for transformers, motors, generators and many other electrical devices, proving their overload capacity and high reliability even under extreme operating conditions.

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ICT-NOM-410 paper is manufactured from two forms of the aramid polymer, the fibrids (as binding particles) and the flakes in a papermaking process (type 411). In a second step, the NOMEX® papers (types 410, 414, 356, 818) are highly compacted and cross-linked in a high-temperature calendering process.

TYPICAL PROPERTIES

Operating temperature	from -60 to 300 °C
Thermally conductive	Yes
Thermal conductivity	0 W/m*K
Density	1 g/cm³
Flammability (UL 94)	94 V0
Color	White Beige
Specific Gravity	249 547 847
Material	Aramidpapier Aufbau
Material gauge (mm)	0.25 0.38 0.51
Dielectric constant	2.7 3.4 3.7
Dielectric breakdown voltage	17.00 kV/mm
Dielectric strength	27 32 27
Electrically conductive	No
Volume Resistance	1,00 × 10¹⁶ Ω/cm
Tensile strength	306 657

FEATURES

- Thermal stability: UL-approved for use in electrical machines at continuous operating temperatures of up to 220 °C
- Properties are virtually unchanged in continuous operation (UL 546 B)
- Short-term (over hours) operation is also possible at significantly higher temperatures
- Flame retardant, self-extinguishing no melting, LOI value (Limited Oxygen Index) of over 20.8 at 220 °C (the critical value for combustion in normal air) does not support the combustion process (UL 94 V-O)
- Very high mechanical stability (tensile strength, stiffness, tear and tear propagation resistance, bending stability)
- Inherent dielectric strength: short-term loads of 18 to 40 kV/mm, possible without further treatment with lacquers or resins.
- Exceptional chemical resistance to acids and alkalis
- Compatible with all types of paints, adhesives, transformer fluids, lubricating oils and coolants.
- Due to its unique polymer structure, NOMEX® is used in a variety of low temperature applications.
- Insensitive to moisture at equilibrium at 95% relative humidity
- Stress resistance in dry condition, many mechanical properties improve even radiation resistance

DELIVERY FORMS / APPLICATIONS

- als Zuschnitt, Stanzteil oder Laserschneidteil
- wenn erforderlich auch selbstklebend ausgestattet
- In Zuschnitten und Formen nach Kundenspezifikation
- In Form von Matten / SHEET / Rolle / Lose

Typ 410 Kalandrierter hoch verdichteter Standardtyp

NOMEX® Typ 410 Lieferbare Stärken: von 0,05 mm, 0,08 mm, **0,13 mm**, 0,18 mm, **0,25 mm**, 0,30 mm, 0,38 mm, **0,51 mm**, 0,61 mm, **0,76 mm**

Andere NOMEX® Typen wie:

Typ 414 Ähnlich Typ 410, flexibler, dadurch besser formbar mit offenerer Oberfläche und besserer Saugfähigkeit im Vergleich zu Typ 410

- **Lieferbare Stärken:** von 0,18 mm, 0,25 mm, 0,30 mm, 0,38 mm

Typ 818 (418) Kalandrierter Sondertyp mit 50 % Glimmerplättchen, dadurch höhere Spannungs- und Teilentladungsfestigkeit

- **Lieferbare Stärken:** von 0,08 mm, 0,13 mm, 0,20 mm, 0,25 mm

Auf Anfrage ebenfalls lieferbar

ICT4TIM Partners

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