

## Electrical insulating material

### Hostaphan® RN | FI 13011

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**Composition:** Hostaphan® RN | FI 13011 is a transparent biaxial stretched film made of polyethylene terephthalate (PET). It characterises by special physical properties.

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**Properties:** Hostaphan® RN | FI 13011 offers unique construction possibilities because of the excellent balance of its electrical properties in combination with chemical, thermal and physical properties. Furthermore Hostaphan® RN | FI 13011 characterises by excellent resistance against humidity and common solvents. Since Hostaphan® RN | FI 13011 does not contain any softeners it does not become brittle while ageing under normal conditions.

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**Application:** Hostaphan® RN | FI 13011 is used in the motor- and generator construction as slot insulation, slot closure and as phase insulation. Hostaphan® RN | FI 13011 is used in transformers, chokes and relays as core-, layer- and closure insulation.

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**Standard colour:** Hostaphan® RN | FI 13011 is delivered transparent.

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**Delivery forms:** Hostaphan® RN | FI 13011 is provided as die-cut or formed part, as cut or reel and on rolls (up to a width of 1600 mm).

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## Hostaphan® RN | FI 13011

**Storage:** Hostaphan® RN | FI 13011 can be stored unlimited under normal conditions (20°C, 50% rel. air humidity.)

Property	Test method	Unit	Value					
			12	15	19	23	36	50
Total thickness	-	µm	±0.05	±0.05	±0.08	±1.0	±2.0	±2.5
Mass per unit	-	g/m <sup>2</sup>	17±	21±	27±	32±	50±	70±
Area yield	-	m <sup>2</sup> /kg	60	48	38	31	20.0	14.0
Density	ASTM D 1003-61	-	1.4	1.4	1.4	1.4	1.4	1.4
Tensile strength: Longitudinal Crosswise	ISO 527-1	N/mm <sup>2</sup>	≥230 ≥260	≥230 ≥260	≥230 ≥260	≥230 ≥260	≥210 ≥260	≥210 ≥260
Elongation Longitudinal Crosswise	ISO 527-1	%	≥110 ≥100	≥110 ≥100	≥110 ≥100	≥110 ≥100	≥150 ≥110	≥150 ≥110
Shrinking Longitudinal Crosswise	DIN 40634	%	≤1.3 ≤0.1	≤1.3 ≤0.1	≤1.3 ≤0.1	≤1.3 ≤0.1	≤1.0 ≤0.3	≤1.0 ≤0.3

Property	Test method	Unit	Value					
			75	100	125	190	250	350
Total thickness	-	µm	±3.5	±5.0	±6.5	±10	±12	±14
Mass per unit	-	g/m <sup>2</sup>	105±	140±	175±	266±	350±	490±
Area yield	-	m <sup>2</sup> /kg	9.6	7.2	5.7	3.8	2.9	2.0
Density	ASTM D 1003-61	-	1.4	1.4	1.4	1.4	1.4	1.4
Tensile strength: Longitudinal Crosswise	ISO 527-1	N/mm <sup>2</sup>	≥210 ≥260	≥180 ≥230	≥180 ≥230	≥150 ≥200	≥150 ≥200	≥150 ≥200
Elongation Longitudinal Crosswise	ISO 527-1	%	≥150 ≥110	≥185 ≥120	≥185 ≥120	≥200 ≥140	≥200 ≥140	≥200 ≥140
Shrinking Longitudinal Crosswise	DIN 40634	%	≤1.0 ≤0.3	≤1.0 ≤0.3	≤1.0 ≤0.3	≤1.0 ≤0.3	≤1.0 ≤1.0	≤1.0 ≤1.0

Dr. Dietrich Müller GmbH

## Hostaphan® RN | FI 13011

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**Trademark information:** Hostaphan® is a registered trademark of the company MITSUBISHI POLYESTER FILM.

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**Please note:**

The information in this data sheet are based on our current knowledge and experience. They do not disengage the fabricator and user from own tests and inspections because of the plenty of possible effects. There is no judicial binding assurance of certain properties or of the qualification for a concrete application in our declaration. We recommend consulting us in individual cases. The acceptor of our products has to observe possible industrial property rights as well as present laws by himself.

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Dr. Dietrich Müller GmbH