



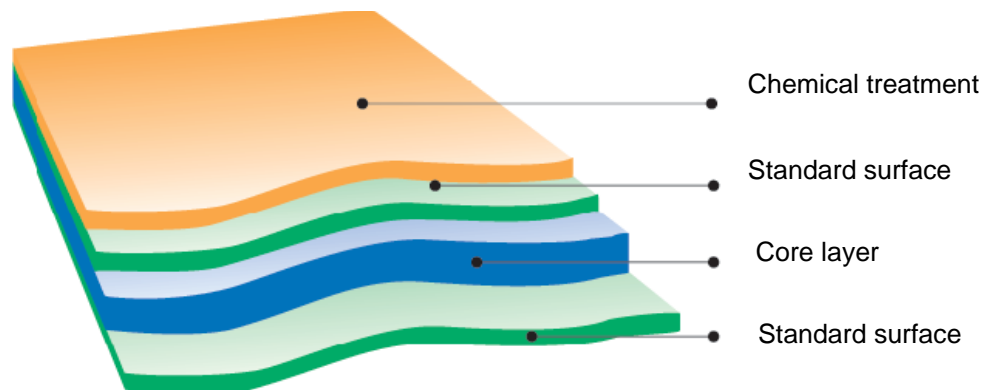
Hostaphan® RNK 2600

Chemically treated film for printing, coating and metallization

Hostaphan® RNK 2600 is a biaxially oriented coextruded film made of polyethylene terephthalate (PET) which is chemically pre-treated on one side to improve adhesion of Al-metallizing, printing inks, adhesives and coatings. Hostaphan® RNK 2600 is generally not suitable for laminates, which have to be resistant to pasteurisation or boiling water or suitable for steam sterilisation.

The outstanding properties of the chemical pre-treatment render corona-treatment of Hostaphan® RNK 2600's function layer unnecessary. On the contrary, corona-treating the pre-treated surface could possibly have a detrimental effect on its properties. There are no restrictions on the corona treatment for the untreated side of Hostaphan® RNK 2600.

Layer structure of Hostaphan® RNK 2600



When metallizing on the chemically treated surface of Hostaphan® RNK 2600, outstanding metal adhesion and subsequent lamination bond strength is achievable.

Typical properties

| Property | Thickness µm | Units | Value | | Test Method | Test Conditions |
|---------------------|----------------------|-------------------|----------------------|----------------------|---|--|
| | | | MD* | TD* | | |
| MECHANICAL | | | | | | |
| Tensile strength | 12-23 36 50-75 | N/mm ² | 260 260 185 | 260 280 270 | ISO 527-1 and ISO 527-3 Sample type 2 | Test speed 100 %/min.; 23 °C, 50 % r.h. |
| Elongation at break | 12-23 36 50-75 | % | 110 140 200 | 100 125 120 | ISO 527-1 and ISO 527-3 Sample type 2 | Test speed 100 %/min.; 23 °C, 50 % r.h. |
| Young's Modulus | 12-23 36 50-75 | N/mm ² | 4400 4500 4000 | 5000 5000 5500 | ISO 527-1 and ISO 527-3 Sample type 2 | Test speed 1 %/min.; 23 °C, 50 % r.h. |

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| Property | Thickness | Units | Value | | Test Method | Test Conditions |
|--|----------------------|---|-------------|------------|---|--|
| | | | MD* | TD* | | |
| F5-value (stress to obtain 5% elongation) | 12-75 | N/mm ² | 110 | 105 | ISO 527-1 and ISO 527-3 Sample type 2 | Test speed 100 %/min.; 23 °C, 50 % r.h. |
| THERMAL | | | | | | |
| Shrinkage | 12-23 36-75 | % | 1.4 1.0 | 0.2 0.2 | DIN 40634 | 150°C, 15 min. |
| OPTICAL | | | | | | |
| Transparency | 12-75 | % | 90 | | ASTM-D 1003-61 method A | - |
| Haze | 12-23 36 50-75 | % | 2 3 4 | | ASTM-D 1003-61 method A | Enlarged measurement angle |
| SURFACE | | | | | | |
| Coefficient of friction (static) | 12-75 | - | 0.4 | | DIN53375 or ASTM-D 1894 | - |
| Surface tension | 12-75 | mN/m (dyne/cm) | 43 | | DIN 53364 | Test inks |
| PHYSICAL/CHEMICAL | | | | | | |
| Density | 12-75 | g/cm ³ | 1.4 | | ASTM-D 1505-68 method C | 23°C |
| Water absorption | 12-75 | % | 0.5 | | ASTM-D 570 | 4 days in water at 23°C |
| BARRIER | | | | | | |
| Air | 12 | cm ³ /m ² x d x bar | 60 | | DIN 53380 | 23°C, 0% r.h. |
| Oxygen | 12 | cm ³ /m ² x d x bar | 110 | | DIN 53380 | 23°C, 50% r.h. |
| Water vapour | 12 | g/m ² x d | 16 | | DIN 53122 | 23°C, 85% r.h. |
| Nitrogen | 12 | cm ³ /m ² x d x bar | 35 | | DIN 53380 | 23°C, 0% r.h. |
| Carbon dioxide | 12 | cm ³ /m ² x d x bar | 500 | | DIN 53380 | 23°C, 0% r.h. |

MD = Machine direction, TD = Transverse direction

Applications:

- Printed laminated films for packaging
- Laminated films with evaporized metal and metal oxide barrier layers
- Laminated films with particularly high bond strength requirements
- Silicon coated films



Hostaphan® RNK 2600 is also available with corona treatment on the 2nd surface (12 µm).
Please refer to the data sheet of Hostaphan® RNK 260C.

Delivery program Hostaphan® RNK 2600

| Thickness µm | Thickness range µm | Yield | | Roll length | Roll diameter | Roll length | Roll diameter |
|-----------------|--------------------------|------------------|--------------------|-------------|------------------|-------------|------------------|
| | | g/m ² | m ² /kg | m | mm | m | mm |
| 12 | ± 0.5 | 17 | 60 | 24 000 | 650 | 48 000 | 900 |
| 19 | ± 0.8 | 27 | 38 | 9 200 | 500 | 18 400 | 700 |
| 23 | ± 1.0 | 32 | 31 | 9 600 | 550 | 19 200 | 800 |
| 36 | ± 2.0 | 50 | 20 | 8 000 | 635 | 12 000 | 770 |
| 50 | ± 2.0 | 70 | 14 | 6 400 | 670 | 9 600 | 810 |
| 75 | ± 3.5 | 110 | 9.6 | 4 000 | 650 | 6 000 | 790 |

Other roll lengths on request. Core diameter: 152.4 mm (6")

Hostaphan® RNK 2600 is permitted for food contact according to the current version of EC Directive 2002/72/EC and FDA regulation 21 CFR 177.1630 under the conditions set out in our current Declaration of Compliance. Before using Hostaphan® RNK 2600 in a food contact article, please request this Declaration of Compliance.

This data sheet reflects our state of knowledge at the time this was prepared. The purpose is to provide an overview of the characteristics of our products and their potential uses. It neither guarantees specific properties nor the suitability of products in specific applications. The user must observe industrial property rights, such as patents or trademarks. The quality of our products is covered by the terms of the General Conditions of Sale of MITSUBISHI POLYESTER FILM GmbH.