

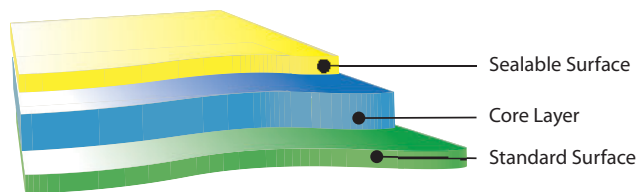


Hostaphan® RHS

Transparent, heat-sealable polyester film

Hostaphan® RHS is a biaxially oriented, coextruded film made of polyethylene terephthalate (PET) with one heat sealable surface. It seals to itself and to other types of polyesters, e.g. APET, A/CPET and unsaturated polyesters but not to polyolefins such as PE, PP and PS. The seal is not peelable.

Layer structure of Hostaphan® RHS



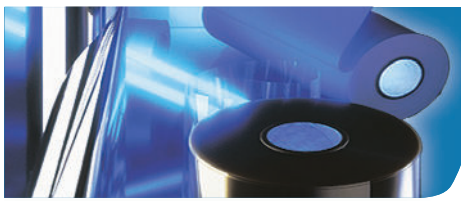
Typical properties

| Property | Thickness μm | Units | Value | | Test Method | Test Conditions |
|---|----------------------------|-------------------|-------------------|-------------------|---|--|
| | | | MD | TD | | |
| MECHANICAL | | | | | | |
| Tensile strength | 12-25 30 75 | N/mm ² | 250 230 185 | 230 230 270 | ISO 527-1 and ISO 527-3 Sample type 2 | Test speed 100 %/min.; 23 °C, 50 % r.h. |
| Elongation at break | 12-25 30 75 | % | 125 135 200 | 125 130 120 | ISO 527-1 and ISO 527-3 Sample type 2 | Test speed 100 %/min.; 23 °C, 50 % r.h. |
| Young's Modulus | 12-30 75 | N/mm ² | 4300 4000 | 4600 5300 | ISO 527-1 and ISO 527-3 Sample type 2 | Test speed 1 %/min.; 23 °C, 50 % r.h. |
| F5-value (stress to obtain 5% elongation) | 12-75 | N/mm ² | 105 | 95 | ISO 527-1 and ISO 527-3 Sample type 2 | Test speed 100 %/min.; 23 °C, 50 % r.h. |
| THERMAL | | | | | | |
| Shrinkage | 12, 15, 20 25, 30 75 | % | 1.6 1.4 1.0 | 0.1 0.1 0.1 | DIN 40634 | 150°C, 15 min. |
| OPTICAL | | | | | | |
| Haze | 12-25 30 75 | % | 2 2.2 3.5 | | ASTM-D 1003-61 method A | Enlarged measurement angle |



| Property | Thickness μm | Units | Value | | Test Method | Test Conditions |
|----------------------------------|----------------------------|--|-------|--------|----------------------------|---|
| | | | MD | TD | | |
| SURFACE | | | | | | |
| Coefficient of friction (static) | 12-75 | - | | | DIN53375 or ASTM-D 1894 | - |
| Sealing side/sealing side | | | | blocks | | |
| Sealing side/standard side | | | | 0.4 | | |
| Standard side/standard side | | | | 0.4 | | |
| Surface tension Standard side | 12-75 | mN/m (dyne/cm) | | 43 | DIN 53364 | Test inks |
| PHYSICAL/CHEMICAL | | | | | | |
| Density | 12-75 | g/cm^3 | | 1.39 | ASTM-D 1505-68 method C | 23°C |
| BARRIER | | | | | | |
| Air | 12 | $\text{cm}^3/\text{m}^2 \times \text{d} \times \text{bar}$ | | 60 | DIN 53380 | 23°C, 0% r.h. |
| Oxygen | 12 | $\text{cm}^3/\text{m}^2 \times \text{d} \times \text{bar}$ | | 110 | DIN 53380 | 23°C, 50% r.h. |
| Water vapour | 12 | $\text{g/m}^2 \times \text{d}$ | | 16 | DIN 53122 | 23°C, 85% r.h. |
| Nitrogen | 12 | $\text{cm}^3/\text{m}^2 \times \text{d} \times \text{bar}$ | | 35 | DIN 53380 | 23°C, 0% r.h. |
| Carbon dioxide | 12 | $\text{cm}^3/\text{m}^2 \times \text{d} \times \text{bar}$ | | 500 | DIN 53380 | 23°C, 0% r.h. |
| HEAT SEAL/PEEL PARAMETERS | | | | | | |
| Minimum sealing temperature | 12-75 | °C | | 130 | - | - |
| Sealing strength | 12-75 | N/15 mm | | 2-3 | - | Finseal @130°C, 4 bar, 0.5 sec, T-peel |

MD = Machine direction, TD = Transverse direction



Delivery program Hostaphan® RHS

| Thickness μm | Yield | | Roll length <i>m</i> | Roll- diameter <i>mm</i> |
|----------------------------|-----------------------|------------------------|-------------------------|--------------------------------|
| | g/m^2 | m^2/kg | | |
| 12 | 17 | 60 | 24 000 | 650 |
| 15 | 21 | 48 | 11 200 | 490 |
| 20 | 28 | 36 | 9 200 | 540 |
| 25 | 35 | 29 | On request | On request |
| 30 | 42 | 24 | " | " |
| 75 | 104 | 9.6 | " | " |

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

Hostaphan® RHS can be used in packaging applications and as protective film for glass fibre reinforced panels.

Hostaphan® RHS is also available with various pre-treatments:

Hostaphan® RHS C, 12-15 μm : Corona treatment on the non-sealing side.

Hostaphan® RHS 2600, **Hostaphan® RHS CT01** or **Hostaphan® RHS 2CSR**, 12-30 μm : Chemically treated on the non-sealing side for improved adhesion of evaporated metal layers, printing inks or coatings.

This Hostaphan® film is permitted for food contact according to the current version of EU Regulation 1935/2004 and 10/2011 as well as FDA regulation 21 CFR 177.1630 under the conditions set out in our current Declaration of Compliance. Before using this Hostaphan® film 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. The values given reflect the typical characteristics of the film. They are not specification limits. They are neither a guarantee of 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.