

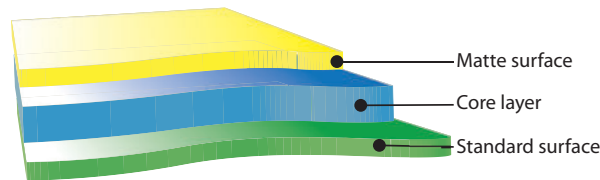


Hostaphan® MPKN

One side matte polyester film for stand-up pouches

Hostaphan® MPKN is a biaxially oriented, coextruded 3-layer film made of polyethylene terephthalate (PET), which is characterized by a matte and a smooth surface. This special structure offers a matte but well defined and high contrast printing image. This film is especially suitable for stand-up pouches.

Layer structure of Hostaphan® MPKN



Typical properties

| Property | Thickness μm | Units | Value | | Test Method | Test Conditions |
|---|-----------------|-------------------|-------|------|---|--|
| | | | MD | TD | | |
| MECHANICAL | | | | | | |
| Tensile strength | 12 | N/mm ² | 210 | 240 | ISO 527-1 and ISO 527-3 Sample type 2 | Test speed 100 %/min.; 23 °C, 50 % r.h. |
| Elongation at break | 12 | % | 130 | 100 | ISO 527-1 and ISO 527-3 Sample type 2 | Test speed 100 %/min.; 23 °C, 50 % r.h. |
| Young's Modulus | 12 | N/mm ² | 3900 | 5000 | 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 | N/mm ² | 100 | 100 | ISO 527-1 and ISO 527-3 Sample type 2 | Test speed 100 %/min.; 23 °C, 50 % r.h. |
| THERMAL | | | | | | |
| Shrinkage | 12 | % | 1.6 | 0.4 | DIN 40634 | 150°C, 15 min. |
| OPTICAL | | | | | | |
| Transparency | 12 | % | 90 | | ASTM-D 1003-61 method A | - |
| Haze | 12 | % | 42 | | ASTM-D 1003-61 method A | Enlarged measurement angle |
| SURFACE | | | | | | |
| Coefficient of friction (static) | 12 | - | 0.4 | | DIN53375 or ASTM-D 1894 | - |
| Gloss | 12 | - | | | DIN 67530 | Measuring angle 60° |
| Matte surface | | | 42 | | | |
| Standard surface | | | 110 | | | |



| Property | Thickness μm | Units | Value | | Test Method | Test Conditions |
|-------------------|----------------------------|------------------------|-------|----|----------------------------|-----------------|
| | | | MD | TD | | |
| PHYSICAL/CHEMICAL | | | | | | |
| Density | 12 | g/cm^3 | 1.4 | | ASTM-D 1505-68 method C | 23°C |

MD = Machine direction, TD = Transverse direction

Applications:

- The one-side matte MPKN-film is especially suited for reverse printed packaging applications and labels. It is especially suitable for stand-up pouches

Delivery program Hostaphan® MPKN

| Thickness μm | Yield | | Roll length <i>m</i> | Roll-diameter <i>mm</i> | Roll length <i>m</i> | Roll-diameter <i>mm</i> |
|----------------------------|-----------------------|------------------------|-------------------------|----------------------------|-------------------------|----------------------------|
| | g/m^2 | m^2/kg | | | | |
| 12 | 17 | 60 | 24 000 | 630 | 48 000 | 900 |

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

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.