Hostaphan® RD and RD 26HC

Transparent polyester film with one smooth, blocking surface

Hostaphan® RD is a biaxially oriented, coextruded film made of polyethylene terephthalate (PET) with different topography of the two surfaces. While the surface structure of one surface is the same as a standard PET film, the functional surface side displays an extremely regular surface structure with very low roughness. Hostaphan® RD 26HC has an additional chemical treatment on the standard surface. A corona treatment on the chemically treated side is not necessary but could negatively affect properties. The film is furthermore not suited for applications where it is retorted or pasteurized.

Layer structure of Hostaphan® RD and RD 26HC

![Layer structure diagram]

Typical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Thickness μm</th>
<th>Units</th>
<th>Value</th>
<th>Test Method</th>
<th>Test Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MD</td>
<td>TD</td>
<td>MD</td>
<td>TD</td>
<td>MD</td>
</tr>
<tr>
<td>MECHANICAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensile strength</td>
<td>12</td>
<td>23</td>
<td>N/mm²</td>
<td>270</td>
<td>250</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>12</td>
<td>23</td>
<td>%</td>
<td>125</td>
<td>125</td>
</tr>
<tr>
<td>F5-value (stress to obtain 5% elongation)</td>
<td>12, 23</td>
<td>N/mm²</td>
<td>110</td>
<td>100</td>
<td>ISO 527-1 and ISO 527-3 Sample type 2</td>
</tr>
<tr>
<td>THERMAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shrinkage</td>
<td>12</td>
<td>23</td>
<td>%</td>
<td>1.5</td>
<td>0.1</td>
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<tr>
<td>OPTICAL</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Haze</td>
<td>12</td>
<td>23</td>
<td>%</td>
<td>1.7</td>
<td>2.0</td>
</tr>
</tbody>
</table>
### Property | Thickness μm | Units | Value | Test Method | Test Conditions
--- | --- | --- | --- | --- | ---
**SURFACE**
Coefficient of friction (static)
Standard surface/Standard surface
Standard surface/Functional surface
Functional surface/Functional surface
Gloss/Brilliance
Mean Roughness

| Property | Thickness μm | Units | Value | Test Method | Test Conditions |
--- | --- | --- | --- | --- | ---
Coherent of friction (static) | 12, 23 | - | 0.4 | DIN53375 or ASTM-D 1894 | -
Standard surface/Standard surface | 12, 23 | - | 0.4 | DIN53375 or ASTM-D 1894 | -
Standard surface/Functional surface | 12, 23 | - | 0.4 | DIN53375 or ASTM-D 1894 | -
Functional surface/Functional surface | 12, 23 | - | 0.4 | DIN53375 or ASTM-D 1894 | -
Gloss/Brilliance | 12, 23 | - | 200 | DIN 67530 | Measuring angle 20°
Mean Roughness Standard surface/Functional surface | 12, 23 | nm | 50 | DIN 4768 | Cut off 0.25 mm

**PHYSICAL/CHEMICAL**
Density | 12, 23 | g/cm³ | 1.4 | ASTM-D 1505-68 method C | 23°C

**BARRIER**
Air
Oxygen
Water vapour
Nitrogen
Carbon dioxide | 12 | cm³/m² x d x bar | 60 | DIN 53380 | 23°C, 0% r.h.
| | cm³/m² x d | 110 | DIN 53380 | 23°C, 50% r.h.
| | cm³/m² | 16 | DIN 53122 | 23°C, 85% r.h.
| | cm³/m² | 35 | DIN 53380 | 23°C, 0% r.h.
| | cm³/m² | 500 | DIN 53380 | 23°C, 0% r.h.

MD = Machine direction, TD = Transverse direction

**Applications:**
Laminates for flexible packaging with a high coefficient of friction on the outer side of the packaging:
- High brilliance after metallization and high gas barrier
- High brilliance hot stamping films
- High brilliance holograms

**Delivery program Hostaphan® RD and RD 26HC**

<table>
<thead>
<tr>
<th>Thickness μm</th>
<th>Yield g/m²</th>
<th>Roll length m</th>
<th>Roll diameter mm</th>
<th>Roll length m</th>
<th>Roll diameter mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>17</td>
<td>24 000</td>
<td>650</td>
<td>48 000</td>
<td>900</td>
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<tr>
<td>23</td>
<td>32</td>
<td>9 600</td>
<td>550</td>
<td>19 200</td>
<td>800</td>
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</table>

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.