



Hostaphan® GN

Glass clear polyester film

Hostaphan® GN is a glass clear biaxially oriented film, made of polyethylene terephthalate (PET) and is characterized by its high transparency and surface gloss and its low haze accompanied by its excellent mechanical strength and dimensional stability.

Hostaphan® GN is one or two side chemically treated for improved slip and processability as well as for improvement of the adhesion of coatings and printing inks. Details see next page!

Typical properties

Property	Thickness µm	Units	Value		Test Method	Test Conditions
			MD	TD		
MECHANICAL						
Tensile strength	50-250	N/mm ²	190	220	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
Elongation at break	50-250	%	195	145	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
Young's Modulus	50-125 175-250	N/mm ²	4000 3900	4800 4500	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)	50-96 125-250	N/mm ²	105 110	100 105	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
THERMAL						
Shrinkage	50-250	%	1.0	0.1	DIN 40634	150°C, 15 min.
OPTICAL						
Transparency	50-250	%	91		ASTM-D 1003-61 method A	-
Haze (for 1-side treated film)	50, 75 96 125 175 250	%	0.5 0.6 0.6 0.7 1.2		ASTM-D 1003-61 method A	Enlarged measurement angle
SURFACE						
Roughness Ra value	50-250	nm	10		DIN 4768	Cut off 0.25 mm
PHYSICAL/CHEMICAL						
Density	50-250	g/cm ³	1.4		ASTM-D 1505-68 method C	23°C

MD = Machine direction, TD = Transverse direction



HOSTAPHAN®

Product description:

Hostaphan® GN 4600A/460I/4660A:

The chemical treatment of these grades provides excellent adhesion primarily to water based coatings and printing inks.

Hostaphan® GN 4600A: One side treated, treated side wound out.

Hostaphan® GN 460I: One side treated, treated side wound in.

Hostaphan® GN 4660A: Two side treated.

Hostaphan® GN CT010/CT01I/CT01B/CT020/CT02B:

The chemical treatment of these grades provides excellent adhesion primarily to solvent based coatings and printing inks.

Hostaphan® GN CT010: One side treated, treated side wound out

Hostaphan® GN CT01I: One side treated, treated side wound in

Hostaphan® GN CT01B: Two side treated

Hostaphan® GN CT020: One side treated, treated side wound out

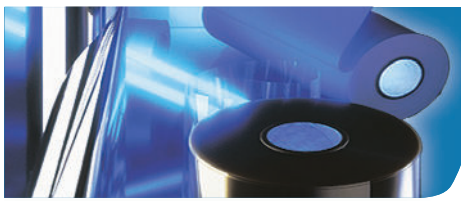
Hostaphan® GN CT02B: Two side treated

Applications:

- Membrane touch switches
- Imaging/Business graphics
- Printing
- Labels
- Packaging

Product advantages:

- Suitable for all standard printing processes (offset, flexographic, rotogravure and book printing).
- Glass clear films with smooth surfaces for excellent optics.
- Outstanding heat resistance.
- Food contact approval.



Delivery program Hostaphan® GN

Thickness <i>µm</i>	Yield		Roll length <i>m</i>	Roll- diameter <i>mm</i>	Roll length <i>m</i>	Roll- diameter <i>mm</i>
	<i>g/m²</i>	<i>m²/kg</i>				
50	70	14.3	3 200	485	6 400	670
75	105	9.5	2 000	475	4 000	650
96	134	7.4	1 600	480	3 200	655
125	175	5.7	1 280	485	2 560	670
175	245	4.1	800	475	1 600	630
250	350	2.9	600	475	1 200	650

Other roll lengths on request. Core diameter: 152.4 mm (6"). Rolls are preferably supplied with knurls.

For detailed information of available grades please contact your local sales representative or directly us.

General storage conditions

Hostaphan® polyester film is largely unaffected by climatic influences. We recommend that the film is kept in the original packaging until used. A dry dust-free storage room with an ambient temperature below 30°C is recommended. Avoid storing the film outdoors for any significant period of time where it will be exposed to harmful influences such as humidity, rain or direct sunlight.

Specific handling instruction for Hostaphan® GN 4600A/460I/4660A

The slip coating on Hostaphan® GN 4600A/460I/4660A is sensitive to moisture. If this coating gets wet, then the film rolls will block and will not be able to be unwound. The rolls are wrapped in a protective tubular polyethylene outer wrap film to prevent moisture damage, and care must be taken to ensure that this wrap is dry before it is removed and no water gets into contact with the roll faces. Rolls should be transferred, in the transport packaging, to the processing area or a room with a similar climate at least 24 hours before processing.

The properties shown in this technical data sheet only apply to the film itself. We cannot guarantee the properties of an intermediate or final product made from or using the film. Instead, the intermediate or final product must be subjected to standard industrial testing.

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.