



Hostaphan[®] GN

Glass clear 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, printing inks or metallic layers. Details see next page!

Typical properties

Property	Thickness μm	Units	Value		Test Method	Test Conditions
			MD*	TD*		
MECHANICAL						
Tensile strength	50-125 175-250	N/mm ²	180 175	230 220	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
Elongation at break	50-125 175-250	%	190 175	130 120	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	4100 3900	4900 4600	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)	50-125 175-250	N/mm ²	105 110	105 110	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
THERMAL						
Shrinkage	50-175 250	%	1.0 1.0	0.1 0.9	DIN 40634	150°C, 15 min.
OPTICAL						
Transparency	50-250	%	91		ASTM-D 1003-61 method A	-
Haze (for 1-side treated film)	50 100 125 175 250	%	0.5 0.6 0.6 1.1 1.5		ASTM-D 1003-61 method A	Enlarged measurement angle
Yellowness Index	50 100 125 175 250	-	1.5 2.0 2.5 2.8 3.0		ASTM-D 1925- 63T	



Property	Thickness	Units	Value		Test Method	Test Conditions
			MD*	TD*		
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

Product description:

Hostaphan® GN 4600/460I/4660:

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

Hostaphan® GN 4600: one side treated, treated side wound out.

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

Hostaphan® GN 4660: two side treated

Hostaphan® GN CT01O/CT01I/CT01B:

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

Hostaphan® GN CT01O: one side treated, treated side wound out

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

Hostaphan® GN CT01B: two side treated

Applications:

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

Product advantages:

- Suitable for all standard printing processes (offset, flexographic, rotogravure and book printing).
We shall be happy to recommend ink manufacturers on request.
- Glass clear films with smooth surfaces for excellent optics.
- Outstanding heat resistance.



Delivery program Hostaphan® GN

Thickness μm	Thickness range μm	Yield		Roll length	Roll diameter	Roll length	Roll diameter
		g/m^2	m^2/kg	m	mm	m	mm
50	± 2.0	70	14.3	3 200	485	6 400	670
67	± 2.5	94	10.7	3 200	560	6 400	770
100	± 4.0	140	7.1	1 600	485	3 200	670
125	± 6.0	175	5.7	1 280	485	2 560	670
175	± 8.0	245	4.1	800	475	1 600	630
250	± 12.0	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.

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 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.