

## Hostaphan® GBL CSRO

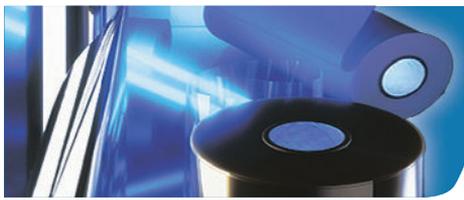
### Glass clear thermoformable film

Hostaphan® GBL CSRO is a 1-side acrylic coated thermoformable glass clear biaxially oriented film, made of polyethylene terephthalate (PET). It is characterized by its optical clarity excellent mechanical and thermal stability. The acrylic coating is applied for better windability and can be used for printing.

### Typical properties

Property	Thickness $\mu\text{m}$	Units	Value		Test Method	Test Conditions
			MD	TD		
<b>MECHANICAL</b>						
Tensile strength	96, 150	N/mm <sup>2</sup>	200	200	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
Elongation at break	96 150	%	180 180	120 160	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
Young's Modulus	96 150	N/mm <sup>2</sup>	3900 3500	4500 4300	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)	96 150	N/mm <sup>2</sup>	100 90	100 100	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
<b>THERMAL</b>						
Shrinkage	96 150	%	2.8 2.2	2.3 1.7	DIN 40634	150°C, 15 min.
<b>OPTICAL</b>						
Transparency	96, 150	%	92		ASTM-D 1003-61 method A	-
Haze	96, 150	%	0.8		ASTM-D 1003-61 method A	Enlarged measurement angle
<b>BARRIER</b>						
Oxygen	96 150	cm <sup>3</sup> /m <sup>2</sup> x d x bar	14.0 9.0		DIN 53380	23°C, 50% r.h.
Water vapour	96 150	g/m <sup>2</sup> x d	2.0 5.0 1.3 3.3		DIN 53122	23°C, 85% r.h. 38°C, 95% r.h. 23°C, 85% r.h. 38°C, 95% r.h.
<b>PHYSICAL/CHEMICAL</b>						
Density	96, 150	g/cm <sup>3</sup>	1.39		ASTM-D 1505-68 method C	23°C

MD = Machine direction, TD = Transverse direction



## Applications:

- Bottom film for flexible packaging
- Multi-cooking packaging with our film Hostaphan® RPSG 42

## Product advantages:

- Excellent optical clarity
- Outstanding heat resistance
- Thermoformable
- Thermo stabilized for ovenable applications
- Excellent flatness
- Antimony free
- Recyclability

## Delivery program Hostaphan® GBL CSRO

Thickness	Yield		Roll length	Roll-diameter	Roll length	Roll-diameter
	$\mu\text{m}$	$\text{g}/\text{m}^2$				
96	133	7.5	1 800	505	3 200	670
150	209	4.8	1 100	496	1 800	618

Other thicknesses and 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.