

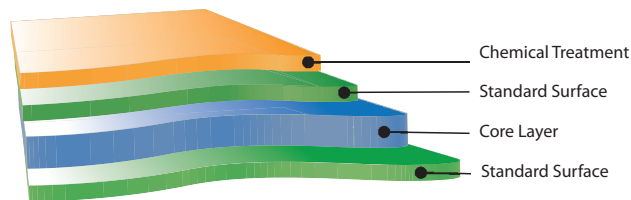


## Hostaphan® PCR PR3F 2CSR

### Chemically treated transparent polyester film for printing and coating packaging laminates containing 30% of post consumer recycled (PCR) polyester

Hostaphan® PCR PR3F 2CSR is a biaxially oriented coextruded film made of polyethylene terephthalate (PET) which is chemically pre-treated on one side. 30 % of the weight consists of post consumer recycled (PCR) polyester. The PCR material is added to the core layer of the film only. The cover layers are made of 100 % virgin material. It is suitable for the manufacture of printed laminates for flexible packaging. The pre-treatment is a cross-linked acrylate which provides very good adhesion to solvent-based inks and laminating adhesives.

#### Layer structure of Hostaphan® PCR PR3F 2CSR



#### Typical properties

Property	Thickness $\mu\text{m}$	Units	Value		Test Method	Test Conditions
			MD	TD		
<b>MECHANICAL</b>						
Tensile strength	12	N/mm <sup>2</sup>	260	260	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
Elongation at break	12	%	110	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 <sup>2</sup>	4400	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 <sup>2</sup>	110	105	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
<b>THERMAL</b>						
Shrinkage	12	%	1.4	0.2	DIN 40634	150°C, 15 min.
<b>OPTICAL</b>						
Transparency	12	%	90		ASTM-D 1003-61 method A	-
Haze	12	%	3		ASTM-D 1003-61 method A	Enlarged measurement angle
<b>SURFACE</b>						



Property	Thickness $\mu\text{m}$	Units	Value		Test Method	Test Conditions
			MD	TD		
Coefficient of friction (static)	12	-	0.4		DIN53375 or ASTM-D 1894	-
Surface tension Non treated side	12	mN/m (dyne/cm)	43		DIN 53364	Test inks
PHYSICAL/CHEMICAL						
Density	12	$\text{g/cm}^3$	1.4		ASTM-D 1505-68 method C	23°C
Water absorption	12	%	0.5		ASTM-D 570	4 days in water at 23°C
BARRIER						
Air	12	$\text{cm}^3/\text{m}^2 \times \text{d} \times \text{bar}$	60		DIN 53380	23°C, 0% r.h.
Oxygen	12	$\text{cm}^3/\text{m}^2 \times \text{d} \times \text{bar}$	110		DIN 53380	23°C, 50% r.h.
Water vapour	12	$\text{g}/\text{m}^2 \times \text{d}$	16		DIN 53122	23°C, 85% r.h.
Nitrogen	12	$\text{cm}^3/\text{m}^2 \times \text{d} \times \text{bar}$	35		DIN 53380	23°C, 0% r.h.
Carbon dioxide	12	$\text{cm}^3/\text{m}^2 \times \text{d} \times \text{bar}$	500		DIN 53380	23°C, 0% r.h.

MD = Machine direction, TD = Transverse direction

### Delivery program Hostaphan® PCR PR3F 2CSR

Thickness $\mu\text{m}$	Yield		Roll length <i>m</i>	Roll-diameter <i>mm</i>	Roll length <i>m</i>	Roll-diameter <i>mm</i>
	$\text{g}/\text{m}^2$	$\text{m}^2/\text{kg}$				
12	17	60	24 000	650	48 000	

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 EC Directive 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. Please note that Hostaphan® PCR is intended for the manufacture of materials and articles for contact with all types of foodstuffs for hotfill and/or long term storage at or below room temperature. Before using this Hostaphan® film in a food contact article, please request the 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.