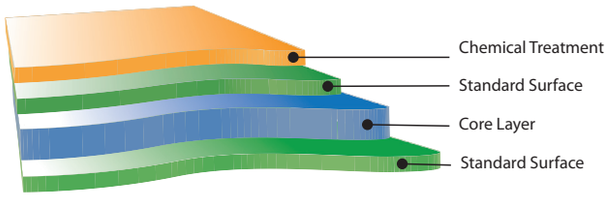
Hostaphan® RNK 2CSR

Chemically treated transparent polyester film for printing, coating and sterilizable packaging laminates

Hostaphan® RNK 2CSR is a biaxially oriented coextruded film made of polyethylene terephthalate (PET) which is chemically pre-treated on one side. It is suitable for the manufacture of printed laminates for flexible packaging, particularly if the packaging is required to resist sterilization in hot water or steam. The pre-treatment is a cross-linked acrylate which provides very good adhesion to solvent-based inks and laminating adhesives.

Layer structure of Hostaphan® RNK 2CSR



Typical properties

Property	*Thickness µm*	*Units*	*Value*		*Test Method*	*Test Conditions*
			MD	*TD*		
MECHANICAL						
Tensile strength	12-23 36 50	N/mm²	260 260 185	260 280 270	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
Elongation at break	12-23 36 50	%	110 140 200	100 125 120	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
Young´s Modulus	12-23 36 50	N/mm²	4400 4500 4000	5000 5000 5500	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% elon-gation)	12-50	N/mm²	110	105	ISO 527-1 and ISO 527-3 Sample type 2	Test speed 100 %/min.; 23 °C, 50 % r.h.
THERMAL						
Shrinkage	12-23 36-50	%	1.4 1.0	0.2 0.2	DIN 40634	150°C, 15 min.
OPTICAL						
Transparency	12-50	%	91		ASTM-D 1003-61 method A	-
Haze	12-23 36 50	%	2 3 4		ASTM-D 1003-61 method A	Enlarged measurement angle

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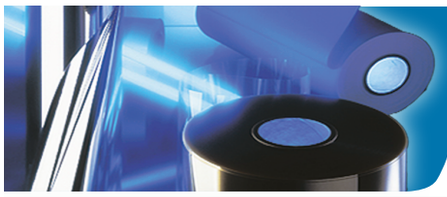

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Property	Thickness µm	Units	Value MD	Value TD	Test Method	Test Conditions
SURFACE						
Coefficient of friction (static)	12-50	-	0.4		DIN53375 or ASTM-D 1894	-
Surface tension Non treated side	12-50	mN/m (dyne/cm)	43		DIN 53364	Test inks
PHYSICAL/CHEMICAL						
Density	12-50	g/cm3	1.4		ASTM-D 1505-68 method C	23°C
Water absorption	12-50	%	0.5		ASTM-D 570	4 days in water at 23°C
BARRIER						
Air	12	cm^3/m^2 x d x bar	60		DIN 53380	23°C, 0% r.h.
Oxygen	12	cm^3/m^2 x d x bar	110		DIN 53380	23°C, 50% r.h.
Water vapour	12	g/m^2 x d	16		DIN 53122	23°C, 85% r.h.
Nitrogen	12	cm^3/m^2 x d x bar	35		DIN 53380	23°C, 0% r.h.
Carbon dioxide	12	cm^3/m^2 x d x bar	500		DIN 53380	23°C, 0% r.h.

MD = Machine direction, TD = Transverse direction

Delivery program Hostaphan® RNK 2CSR

Thickness µm	Yield g/m^2	Yield m^2/kg	Roll length m	Roll-diameter mm	Roll length m	Roll-diameter mm
12	17	60	24 000	650	48 000	900
19	27	38	9 200	500	18 400	700
23	32	31	9 600	550	19 200	800
36	50	20	8 000	635	12 000	770
50	70	14	6 400	670	9 600	810
75	110	9.6	4 000	650	6 000	790

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. 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.

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