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CLS

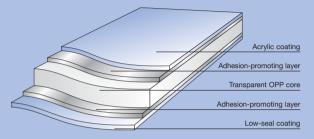
Transparent low-sealing OPP film for packaging

- For high-speed HFFS capability
- Wide sealing range
- Easy convertibility
- Excellent optical properties
- Good barrier to moisture and aromas



TREOFAN PACKAGING FILM CLS

Transparent OPP film, on one side acrylic coating, on one side very low-seal coating



Treofan CLS has been especially designed for the food packaging industry. Treofan CLS, thanks to its wide operative window, can be used on high-speed HFFS machines as well as on machines where frequent speed variations occur. In addition, its excellent optical properties enhance the presentation of the packed product. Treofan CLS can be used as single web or in laminate structures.

APPLICATIONS AND PROCESSING

Treofan CLS, thanks to its wide operative window on fast HFFS machines, is recommended for the packaging of biscuits, bakery and confectionery that need a very high sealing integrity, especially in presence of contaminant agents like powders.

Conversion:

 printable on the acrylic side with flexographic and rotogravure technologies. Adhesive lamination on the acrylic side with acrylic- or PVdC-coated films and other substrates

Storage:

 Treofan CLS has to be protected from water and from high levels of humidity. Place Treofan CLS in the processing area approximately 24 hours prior to processing

PRODUCT FEATURES

Main properties:

- outstandingly wide sealing range
- · excellent seal integrity in presence of contaminant agents
- only for fine-seal application (HFFS)
- excellent optical properties
- · good moisture and aroma barrier
- excellent printability on the acrylic side
- 100% water-based coating

Certified according to

DIN EN ISO 9001:2000

Compliance with industrial health and safety standards:
Treofan OPP films do not present any significant danger to health
and safety in the workplace, provided they are used for the
intended purpose in accordance with conventional practices
and that health and safety regulations are observed. Relevant
guidelines can be found in our safety information.

TECHNICAL DATA (typical values)

Properties	CLS 20	CLS 25	CLS 30	CLS 40	Unit	Measuring method
Nominal thickness	20	25	30	40	μm	-
Unit weight	18.2	22.7	27.3	36.4	g/m²	ISO 4591
Density	0.91	0.91	0.91	0.91	g/cm ³	-
Yield	54.9	44.1	36.6	27,5	m²/kg	
Tensile strength: machine direction transverse direction	140 300	140 300	140 300	140 300	N/mm ² N/mm ²	ASTM D 882 DIN 53455
Elongation at break: machine direction transverse direction	210 50	210 50	210 50	210 50	% %	ASTM D 882 DIN 53455
Dimensional stability: machine direction transverse direction	-4.5 -2.5	-4.5 -2.5	-4.5 -2.5	-4.5 -2.5	% %	130°C, 5 min 130°C, 5 min
Coefficient of friction (acr/acr)	0.30	0.30	0.30	0.30	-	ASTM D 1894 - DIN 53375
Heat-seal range: acr/acr ls/ls	100–145 75–145	100–145 75–145	100–145 75–145	100–145 75–145	°C	10 psi, 0.2" (flat bar) 40 psi, 0.2" (flat bar)
Heat-seal strength: acr/acr ls/ls	210 210	230 230	250 250	270 270	g/cm	Treofan Treofan
Water vapour transmission: 38°C/90% rh 23°C/85% rh	6.5 1.3	5.0 1.1	4.5 1.0	3.5 0,6	g/m²*d g/m²*d	ASTM F1249 ASTM F1249
Oxygen permeability: 23°C/75% rh	950	850	750	600	cm ³ /m ² *d	ASTM D 3985
Haze	1.2	1.2	1.3	1.6	%	ASTM D 1033
Gloss (acrylic side)	90	90	90	90	‰	ASTM D 2457

Tests have shown that under the prescribed storage conditions the characteristics of Treofan CLS will maintain consistent performance and will be best before use throughout a 6-months period after delivery. Treofan CLS is largely unaffected by climatic influences, but should not be stored at temperatures above 30°C (86°F). The rolls should be kept in their original wrapping until used. After the rolls have been unwrapped, they should be stored safely in horizontal position.

Food Safety

Treofan CLS has been developed specially for packaging foods and meets the specific requirements on health and safety. It meets the FDA and EC regulations, which includes the specific "German Food and Commodity Act" and the current recommendations of the BfR. Compliance with other specific national regulations is available on request.

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AVAILABILITY (unprinted film)

Reel length (m):

Packaging film	Standard length	6-times standard
CLS 20	3,500	21,000
CLS 25	2,800	16,800
CLS 30	2,350	14,100
CLS 40	1,750	10,500

Maximum reel outside diameter (mm):

Core diameter Standard length 6-times standard 76 mm approx. 320 – 152 mm approx. 340 approx. 780

Maximum reel width: 2,000 mm

Standard conditions: Is (low-seal) coating on the internal side

The figures and the data provided in this data sheet are consistent with the current state of our knowledge, and are intended to provide general information on our products and their applications. They do not constitute a guarantee of any specific product attributes or the suitability of products for specific applications. Any existing commercial rights or patents must be observed.

