

enhance

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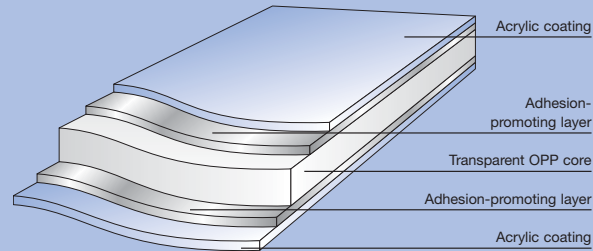
## CLH

- Transparent, on both sides acrylic-coated OPP film for holograms and lamination
- Easy convertibility (embossing, printing and adhesive lamination)
- Superior optical properties



## TREOFAN PACKAGING FILM CLH

Transparent, on both sides acrylic-coated OPP film



Treofan CLH has been especially designed for the holograms market and for lamination with paper, carton and plastic films. Treofan CLH is also a suitable support for vacuum metallization.

## PRODUCT FEATURES

Main properties:

- superior optical properties
- ideal support for embossing and metallization
- excellent in adhesive lamination
- printable on both sides
- heat-sealable on both sides
- good barrier to aromas and moisture
- full water-based coating

## APPLICATIONS AND PROCESSING

Treofan CLH is a film especially designed to be used in lamination and holographic applications.

**Conversion:**

- embossing and metallization of the acrylic surface for the holograms market
- printable on both sides with flexographic and rotogravure technologies
- adhesive lamination with paper, carton and other sealant or non-sealant substrates

**Storage:**

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

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	CLH 20	CLH 25	CLH 30	CLH 35	CLH 40	CLH 50	Unit	Measuring method
Nominal thickness	20	25	30	35	40	50	µm	–
Unit weight	18.2	22.7	27.3	31.8	36.4	45.5	g/m <sup>2</sup>	ISO 4591
Density	0.91	0.91	0.91	0.91	0.91	0.91	g/cm <sup>3</sup>	–
Yield	54.9	44.1	36.6	31.4	27.5	22.0	m <sup>2</sup> /kg	–
Tensile strength: machine direction transverse direction	140 300	140 300	140 300	140 300	140 300	140 300	N/mm <sup>2</sup> N/mm <sup>2</sup>	ASTM D 882 DIN 53455
Elongation at break: machine direction transverse direction	210 50	210 50	210 50	210 50	210 50	210 50	% %	ASTM D 882 DIN 53455
Dimensional stability: machine direction transverse direction	-4.0 -2.5	-4.0 -2.5	-4.0 -2.5	-4.0 -2.5	-4.0 -2.5	-4.0 v	% %	130°C, 5 min 130°C, 5 min
Coefficient of friction (film/film)	0.30	0.30	0.30	0.30	0.30	0.30	–	ASTM D 1894 – DIN 53375
Heat-seal range	100–145	100–145	100–145	100–145	100–145	100–145	°C	10 psi, 0.2" (flat bar)
Heat-seal strength	210	230	250	270	270	270	g/cm	Treofan
Water vapour transmission: 38°C/90% rh 23°C/85% rh	6.5 1.3	5.0 1.1	4.5 1.0	4.0 0.8	3.5 0.6	2.7 0.4	g/m <sup>2</sup> *d g/m <sup>2</sup> *d	ASTM F 1249 ASTM F 1249
Oxygen permeability: 23°C/75% rh	950	850	750	650	600	550	cm <sup>3</sup> /m <sup>2</sup> *d	ASTM F 1927
Haze	1.2	1.2	1.3	1.5	1.6	1.6	%	ASTM D 1033
Gloss	90	90	90	90	90	90	%	ASTM D 2457

## AVAILABILITY (unprinted film)

Reel length (m):

Packaging film	Standard length	6-times standard
CLH 20	3,500	21,000
CLH 25	2,800	16,800
CLH 30	2,350	14,100
CLH 35	2,000	12,000
CLH 40	1,750	10,500
CLH 50	1,400	8,400

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

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.

Tests have shown that under the prescribed storage conditions the characteristics of Treofan CLH will maintain consistent performance and will be best before use throughout a 6-months period after delivery. Treofan CLH 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 CLH 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.

## HEADOFFICE TREOFAN GROUP

Treofan Germany GmbH & Co. KG  
Am Prime Parc 17  
65479 Raunheim, Germany  
Phone: +49 6142 200 0  
Fax: +49 6142 200 3299

## SALES CONTACTS

**Business Team Head Packaging**  
Phone: +49 6142 200 3265  
Fax: +49 6142 200 3299  
guido.bisch@de.treofan.com  
Contact: Guido Bisch

**Africa**  
Phone: +27 11 761 7617  
gunnar.vahlenkamp@za.treofan.com  
Contact: Gunnar Vahlenkamp

**Benelux**  
Phone: +33 5 5660 0994  
michel.malet@treofan.com  
Contact: Michel Malet

**Eastern Europe**  
Phone: +49 6142 200 3263  
peter.breburda@de.treofan.com  
Contact: Peter Breburda

**Export Treofan Group**  
Phone: +34 93 306 8327  
ignacio.velez@es.treofan.com  
Contact: Ignacio Velez

**Germany/Switzerland/Austria**  
Phone: +49 6142 200 3402  
urs.ulrich@de.treofan.com  
Contact: Urs Ulrich

**Iberica**  
Phone: +34 93 306 8327  
ignacio.velez@es.treofan.com  
Contact: Ignacio Velez

**Italy**  
Phone: +39 02 6718 7432  
sergio.arcari@it.treofan.com  
Contact: Sergio Arcari

**Mexico/Latin America**  
Phone: +52 436 363 8044  
Phone: +52 436 363 8115  
alfonso.flores@mx.treofan.com  
Contact: Alfonso Flores

**United Kingdom**  
Phone: +44 1793 34 4004  
carey.ashworth@uk.treofan.com  
Contact: Carey Ashworth

**USA/Canada**  
Phone: +1 336 766 9448  
grant.gustafson@us.treofan.com  
Contact: Grant Gustafson



[www.treofan.com](http://www.treofan.com)