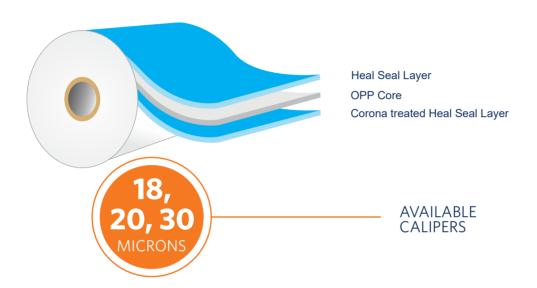
# **TOPPAN**

# TLTI BOPP FILMS

# TRANSPARENT LOW HAZE SEALABLE ONE SIDE CORONA TREATED TIGHT WRAP FOR OVERWRAP



## **DESCRIPTION**

OPP TLTI is transparent heat sealable on either side **BOPP** film. It is specially designed for printed overwrapping applications where machinability is a key factor. TLTI is for wrinkle-free tight wrap packing which provides better moisture barrier and enhanced shelf life.

## **PRODUCT FEATURES**

- Specially formulated for unprinted overwrap application.
- Good shrink properties for wrinkle free appearance
- Consistent and stable slip
- Excellent stiffness s and mechanical properties
- Good performance on high speed machines
- Good anti-static and hot slip
- Good aroma & moisture barrier
- Good optical properties
- Good seal strength
- Good anti-blocking for smooth operation with no jamming

## **APPLICATIONS**

Unprinted overwrap

- Tobacco (cigarettes/cigars)
- CD's & DVD's
- Household and industrial

# LAST UPDATE 23-01-2023 | ISSUE 1/ REV 01

0
<u></u>
REV
$\sim$
1
Ш
ISSUE 1/ I
22
~
-2023
Ö
Ϋ́
$\equiv$
$\mathcal{I}$
23-01
ш
$\vdash$
X
<b>IST UPDATE</b>
3
_
ŝ
÷

		I	l .		l	l .
	PROPERTIES	POSITION	TLT20TI	TLT 22TI	UNIT	METHOD
		'	1			
GENERAL	Nominal Thickness	-	20	22	μ	Internal Method
	Density	-	0.91	0.91	g/cc	Internal Method
	Grammage	-	18.2	20.02	g/m²	Internal Method
	Yield	• -	54.9	50.0	m²/kg	Internal Method
1						
OPTICAL	Haze	-	2	2.2	%	<b>ASTM D 1003</b>
	Gloss	:	95	95	GU	ASTM D 2457
01						
SURFACE	COF	Film (Market	0.25	0.25	1	ACTIA D 1004
		Film/Metal	0.25 38*	0.25 38*	_	ASTM D 1894
	Wetting Tension	: -	38"	38"	-	ASTM D 2578
011						
MECHANICAL	Tensile Strength	- MD	1400	1400	kg/cm²	ASTM D 882
	(at break)	- TD	2700	2700		
	Elongation (at break)	- MD - TD	160 55	160 55	%	<b>ASTM D 882</b>
		- MD	22000	22000		
	Elastic Modulus	- TD	40000	40000	kg/cm²	ASTM D 882
THERMAL						
	Linear Shrinkage	- MD	6	6	%	ASTM D 1204
	Heat Seal Range	-	106-145 400	106-145 400	°C	Internal Method Internal Method
	Heat Seal Strength		400	400	g/25mm	(130°C/1sec/30psi)

<sup>\* 36</sup> dyne/cm guaranteed for 3 months from the invoice date in controlled ambient condition as per below storage guidelines.

The figures and above properties refer to typical values which are indicative only. Customers should verify the suitability of the film for its specific end use. Therefore this document will not represent a product specification.

## **GUIDELINES FOR STORAGE**

Temperature should preferably be less than  $30^{\circ}$ C & humidity  $55\pm5\%$  in storage areas and material should be consumed within three months of receipt. OPP films should be allowed to reach operating room temperature 24 hours before use.

## **FOOD CONTACT**

OPP films complies with the requirements of FDA, EC & REACH regulations. Specific documentation is available on request.

### **SAFETY**

Compliance with industrial health and safety standards. 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 & safety regulations are observed. Relevant guidelines can be found in our MSDS (available upon request).

## **CAUTIONS**

Film characteristics are maintained for six months from the date of invoicing