

**TLT**

BOPP FILMS

TRANSPARENT LOW HAZE SEALABLE TIGHT WRAP FOR OVERWRAP

**DESCRIPTION**

OPP TLT is transparent heat sealable on either side **BOPP** film. It is specially designed for unprinted overwrapping applications where machinability is a key factor. TLT 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 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

	PROPERTIES	POSITION	TLT18	TLT 20	TLT 30	UNIT	METHOD
GENERAL	Nominal Thickness	-	18	20	30	μ	Internal Method
	Density	-	0.91	0.91	0.91	g/cc	Internal Method
	Grammage	-	16.38	18.2	27.3	g/m <sup>2</sup>	Internal Method
	Yield	-	61.1	54.9	36.6	m <sup>2</sup> /kg	Internal Method
OPTICAL	Haze	-	1.8	1.8	2.5	%	ASTM D 1003
	Gloss	-	90	90	90	GU	ASTM D 2457
SURFACE	COF	Film/Metal	0.25	0.25	0.25	-	ASTM D 1894
	Static charge	-	0.5	0.5	0.5	kv	Internal Method
MECHANICAL	Tensile Strength (at break)	- MD	1400	1400	1400	kg/cm <sup>2</sup>	ASTM D 882
		- TD	2700	2700	2700		
	Elongation (at break)	- MD	170	170	170	%	ASTM D 882
		- TD	55	55	55		
	Elastic Modulus	- MD	20000	20000	20000	kg/cm <sup>2</sup>	ASTM D 882
		- TD	30000	30000	30000		
THERMAL	Linear Shrinkage	- MD	6	6	4	%	ASTM D 1204
	Heat Seal Range	-	111-145	111-145	111-145	°C	Internal Method
	Heat Seal Strength	-	400	400	400	g/25mm	Internal Method (130°C/1sec/30psi)
BARRIER	WVTR 38° C 90% rh	-	7	6.5	4.5	g/m <sup>2</sup> /day	ASTM F 1249

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°C & humidity 55±5% 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