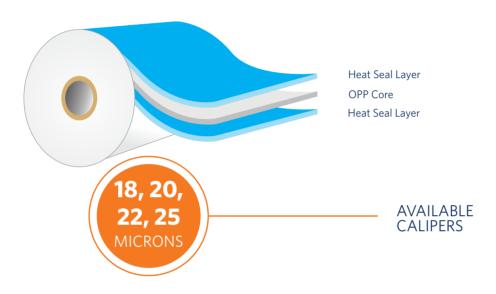
# **TOPPAN**

# TL BOPP FILMS

## TRANSPARENT LOW HAZE SEALABLE FOR OVERWRAP



### **DESCRIPTION**

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

## **PRODUCT FEATURES**

- Specially formulated for unprinted overwrap application
- Consistent and stable slip
- Excellent stiffness and mechanical properties
- Excellent anti-blocking characteristics for use invending machines
- Good anti-static and hot slip
- Good aroma & moisture barrier
- Good optical properties

## **APPLICATIONS**

Unprinted overwrap

- Tobacco (cigarettes/cigars)
- CD's & DVD's
- IV fluid bottles
- Stationary
- Household and industrial

	PROPERTIES	POSITION	TL18	TL20	TL22	TL25	UNIT	METHOD
GENERAL	Nominal Thickness Density Grammage Yield	-	18 0.91 16.38 61.1	20 0.91 18.2 54.9	22 0.91 20.02 50.0	25 0.91 22.75 44.0	μ g/cc g/m² m²/kg	Internal Method Internal Method Internal Method Internal Method
OPTICAL	Haze Gloss		1.8 90	2 90	2 90	2.2 90	% GU	ASTM D 1003 ASTM D 2457
SURFACE	COF (Dynamic) Static Charge	Film/Metal -	0.25 0.6	0.25 0.6	0.25 0.6	0.25 0.6	- Kv	ASTM D 1894 Internal Method
MECHANICAL	(at break) Elongation (at break)	- MD - TD - MD - TD - MD - TD	1300 2500 170 60 20000 32000	1300 2500 170 60 20000 32000	1300 2500 170 60 20000 32000	1300 2500 170 60 20000 32000	kg/cm² % kg/cm²	ASTM D 882  ASTM D 882  ASTM D 882
THERMAL		- MD -	4 111-145 350	4 111-145 350	4 111-145 350	4 111-145 350	% °C g/25mm	ASTM D 1204 Internal Method Internal Method (130°C/1sec/30usi)

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