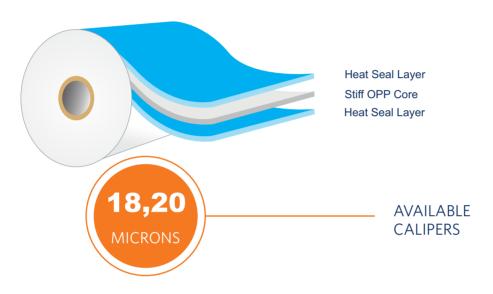
# **TOPPAN**

# TLS BOPP FILMS

# TRANSPARENT SEALABLE SHRINK WRAP 20µ BOPP FILM SPECIAL LOW STATICS GRADE FOR OVERWRAPING



## **DESCRIPTION**

OPP TLS is transparent heat sealable on either side **BOPP** film. It is specially designed for high speed unprinted overwrapping applications where machinability is a key factor. TLS is high shrink film for wrinkle-free optimum package tightness which provides better moisture barrier and enhanced shelf life.

# **PRODUCT FEATURES**

- Specially formulated for unprinted overwrap application
- Outstanding shrink properties for wrinkle free appearance
- Consistent and stable slip
- Excellent stiffness and mechanical properties
- Good performance on high speed machines
- Good anti-static
- 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

# **TOPPAN**

	PROPERTIES	POSITION	TLS18	TLS20	UNIT	METHOD
GENERAL	Nominal Thickness Density Grammage Yield	-	18 0.91 16.38 61.05	20 0.91 18.2 55	g/cc g/m²	Internal Method Internal Method Internal Method Internal Method
OPTICAL	Haze Gloss		<b>2.</b> 5		% GU	ASTM D 1003 ASTM D 2457
SURFACE	COF (Dynamic) Static charge	Film/Metal Film/Film -	0.1 0.1 <		- - k <sub>V</sub>	ASTM D 1894 ASTM D 1894 Internal Method
MECHANICAL	Tensile Strength (at break) Elongation (at break) Elastic Modulus	- MD - TD - MD - TD - MD - TD	28 16 60 22	0	kg/cm² % kg/cm²	ASTM D 882  ASTM D 882  ASTM D 882
THERMAL	Linear Shrinkage Seal Initiation Temp. Heat Seal Strength	- MD/TD Inside Layer	8 - 10 35	· 8	% °C g/25mm	ASTM D 1204 Internal Method Internal Method (130°C/1sec/30psi)

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