# TTTIA

# TRANSPARENT CORONA TREATED BOTH SIDE & HIGHER TREATMENT INSIDE BOPP FILM FOR CONVERSION



#### **DESCRIPTION**

TTTIA is transparent plain high gloss both side corona treated **BOPP** film. One side of this film having high corona treatment with improved adhesion and other side is low corona treated BOPP film. This film is specially designed for printing and lamination process.

### **PRODUCT FEATURES**

- Improved adhesion at high corona treated surface
- Outstanding clarity and gloss
- Printable / Glueable
- Robust machinability
- Suitable for food contact applications
- Water/ Oil/ Grease repellent
- Excellent wetting tension

# **APPLICATIONS**

- Can be used as outside/inner web of laminates
- Confectionery (chocolate/gum/sugar)
- Bakery (biscuits/cookie/crackers)
- Chips/snacks/pasta
- Miscellaneous industrial and house hold applications

# **NOMENCLATURE**

TTTIA... High corona treated surface is Inside & low corona treated surface is Outside TTTOA... High corona treated surface is Outside & low corona treated surface is Inside

	PROPERTIES	POSITION	T18TTIA	T20TTIA	T30TTIA	UNITS	TEST METHOD
GENERAL	Nominal Thickness Density GSM Yield	-	18 0.91 16.4 61.1	20 0.91 18.2 54.9	30 0.91 27.3 36.6	μ g/cc g/m² m²/kg	Internal Method Internal Method Internal Method Internal Method
OPTICAL	Haze Gloss	-	2.0	2.0 95	2.5	% GU	ASTM D 1003 ASTM D 2457
SURFACE	Dynamic COF Wetting tension	Film/Film -		0.30 38*		- dyne/cm	ASTM D 1894 ASTM D 2578
MECHANICAL	Tensile Strength (at break)	-MD -TD		1300 2700		kg/cm²	ASTM D 882
	Elongation (at break)	-MD -TD		190 60		%	ASTM D 882
	Elastic Modulus	-MD -TD		18000 28000		kg/cm²	ASTM D 882
THERMAL	Linear Shrinkage (max)	-MD -TD		4 2		%	Internal Method

<sup>\* 38</sup> dyne/cm guaranteed for 3 months & 36 dyne/cm for 6 months from the invoice date in controlled ambient condition as mentioned in 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°C & humidity 55±5% in storage areas and material should be consumed with three months of receipt. OPP films should be allowed to reach operating room temperature 24 hours before use. Film characteristics are maintained for six months from the date of manufacturing.

#### **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 except for corona treated layer surface tension

# TOPPAN SPECIALITY FILMS