# **TOPPAN**

## TIHR BOPP FILMS

# TRANSPARENT NON HEAT SEALABLEONE SIDE CORONA TREATED, TREATMENT INSIDE, HIGH HEAT RESISTANT BOPP FOR CONVERSION



## **DESCRIPTION**

OPP TIHR is non heat sealable plain high gloss one side corona treated **BOPP** film with good heat resistant characteristics. Its outer untreated surface is modified to endure heat and shrinking during pack sealing; its core layer is also modified for better rigidity compared to conventional plain BOPP Films. Moreover its inside corona treated surface is specifically designed for printing and lamination during conversion.

## **PRODUCT FEATURES**

- Endurance to heat and shrinking during sealing
- Easy Jaw release
- Good wetting tension for printing and lamination
- Suitable for food contact applications
- Water/oil/grease repellent
- Outstanding clarity and gloss

## **APPLICATIONS**

Can be used as outside web of laminates

- Bakery (Biscuits/cookie/crackers)
- Confectionery(chocolates/gum/sugar)
- Chips/tea/coffee/pasta
- Soaps and detergents
- Miscellaneous industrial and house hold applications

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|            | PROPERTIES  | POSITION                     | T15TIHR                     | T18TIHR                      | T20TIHR                    | T25TIHR                                   | UNIT                       | METHOD   |
|------------|---|------------------------------|-----------------------------|------------------------------|----------------------------|---|----------------------------|--|
| GENERAL    | Nominal Thickness<br>Density<br>Grammage<br>Yield | -                            | 15<br>0.91<br>13.65<br>73.3 | 18<br>0.91<br>16.38<br>61.05 | 20<br>0.91<br>18.2<br>54.9 | 25<br>0.91<br>22.75<br>43.95              | μ<br>g/cc<br>g/m²<br>m²/kg | Internal Method<br>Internal Method<br>Internal Method<br>Internal Method |
| OPTICAL    | Haze<br>Gloss                                     | -                            |                             | 2                            | %<br>GU                    | ASTM D 1003<br>ASTM D 2457                |                            |  |
| SURFACE    | COF<br>Wetting tension                            | Film/Film<br>Film/Metal<br>- |                             | 0<br>0<br>3                  | -<br>-<br>dyne/cm          | ASTM D 1894<br>ASTM D 1894<br>ASTM D 2578 |                            |  |
| MECHANICAL | Tensile Strength (at break)                       | - MD<br>- TD                 | 1300<br>2600                |                              |                            |   | kg/cm²                     | ASTM D 882   |
|            | Elongation (at break)                             | - MD<br>- TD                 |                             | 180<br>60                    |                            |   |                            | ASTM D 882   |
|            | Elastic Modulus                                   | - MD<br>- TD                 |                             | 20000<br>36000               |                            |   |                            | ASTM D 882   |
| THERMAL    | Linear Shrinkage                                  | - MD<br>- TD                 |                             | 3<br>1                       |                            |   | %                          | ASTM D 1204  |

<sup>\* 38</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 except for wetting tension