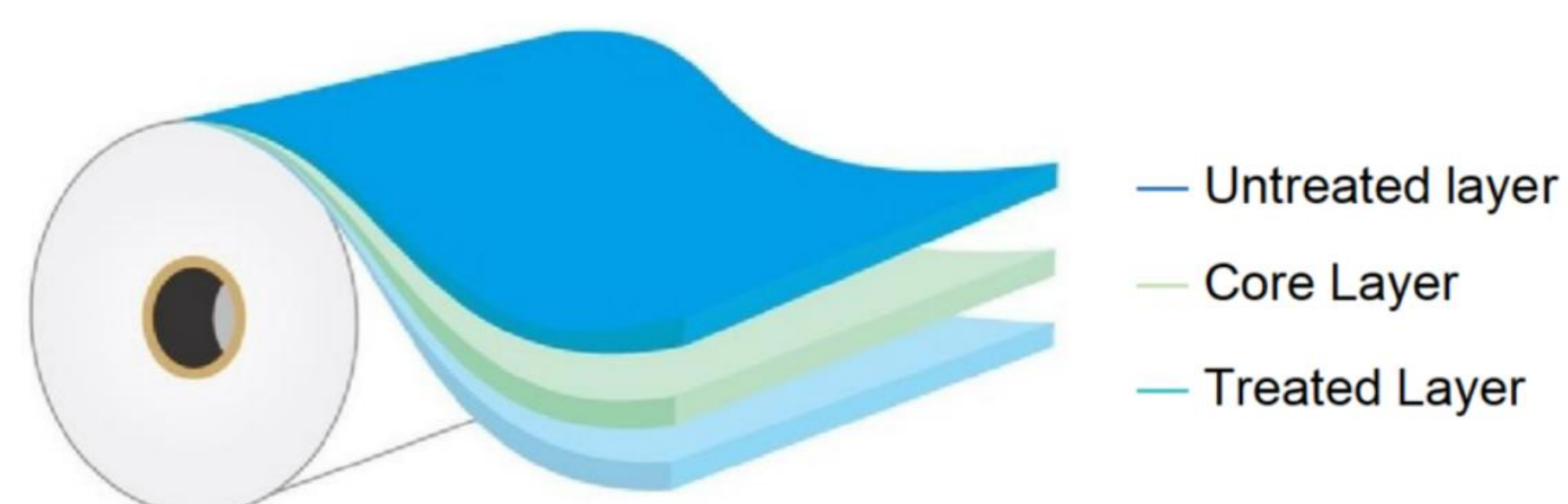


# Transparent Printing Packaging Film

## 11P 15μm

### Structure



### Description

Transparent non-heat sealable film with inner-side corona treatment, ensuring a surface energy of  $\geq 38$  dyn/cm for improved adhesion and printability.

### Application

Intended for lamination with other substrates post-printing; supports 6 to 8-color printing; not compatible with full-area printing.

### Technical Data

| Properties                       | Ref.  | Units                   | ASTM #/<br>Test Method | 11P        |       |       |           |       |       |           |       |       |           |  |
|----------------------------------|-------|-------------------------|------------------------|------------|-------|-------|-----------|-------|-------|-----------|-------|-------|-----------|--|
| <b>Physical Data</b>             |       |                         |                        |            |       |       |           |       |       |           |       |       |           |  |
| Average Thickness                |       | micron                  | D-374-C                | 12         | 15    | 17    | 18        | 20    | 25    | 28        | 30    | 40    | 50        |  |
|                                  |       | gauge                   |                        | 47         | 59    | 67    | 71        | 79    | 98    | 110       | 118   | 157   | 197       |  |
|                                  |       | mils                    |                        | 0.5        | 0.6   | 0.7   | 0.7       | 0.8   | 1.0   | 1.1       | 1.2   | 1.6   | 2.0       |  |
| Thickness Variation              |       | %(±)                    |                        | 3          |       |       |           |       |       |           |       |       |           |  |
| Density                          |       | g/cc                    |                        | 0.905      |       |       |           |       |       |           |       |       |           |  |
| Average Substance                |       | g/m                     |                        | 10.9       | 13.6  | 15.4  | 16.3      | 18.1  | 22.6  | 25.3      | 27.2  | 36.2  | 45.3      |  |
| Surface tension(min)             |       | dynes/cm                | D-2578                 | $\geq 38$  |       |       |           |       |       |           |       |       |           |  |
| Kinetic COF                      | UT-UT |                         | D-1894                 | 0.20-0.35  |       |       |           |       |       |           |       |       |           |  |
| Yield                            |       | m <sup>2</sup> /Kg      | D-4321                 | 92.1       | 73.7  | 65.0  | 61.4      | 55.2  | 44.2  | 39.5      | 36.8  | 27.6  | 22.1      |  |
|                                  |       | in <sup>2</sup> /lb     | D-4321                 | 64739      | 51792 | 45698 | 43160     | 38844 | 31075 | 27745     | 25896 | 19422 | 15537     |  |
| <b>Optical Data</b>              |       |                         |                        |            |       |       |           |       |       |           |       |       |           |  |
| Gloss(45)                        |       | gardner                 | D-2457                 | $\geq 90$  |       |       |           |       |       |           |       |       |           |  |
| Haze                             |       | %                       | D-1003                 | $\leq 2.0$ |       |       |           |       |       |           |       |       |           |  |
| <b>Mechanical Data</b>           |       |                         |                        |            |       |       |           |       |       |           |       |       |           |  |
| Tensile Strength                 |       | kg/cm                   | D-882                  | 120-160    |       |       |           |       |       |           |       |       |           |  |
|                                  |       |                         |                        | 230-320    |       |       |           |       |       |           |       |       |           |  |
| Elongation at break              | MD    | %                       | D-882                  | 140-180    |       |       |           |       |       |           |       |       |           |  |
|                                  | TD    |                         |                        | 50-65      |       |       |           |       |       |           |       |       |           |  |
| <b>Thermal Data</b>              |       |                         |                        |            |       |       |           |       |       |           |       |       |           |  |
| Shrinkage<br>(120°C/248F,5 min.) | MD    | %                       | D-1204                 | 2.0-4.5    |       |       |           |       |       |           |       |       |           |  |
|                                  | TD    |                         |                        | 1.0-2.0    |       |       |           |       |       |           |       |       |           |  |
| HotTack Strength                 |       | g/15mm                  | @125°C                 | 330        |       |       |           |       | 350   |           |       | 380   |           |  |
|                                  |       |                         | @257°F                 |            |       |       |           |       |       |           |       |       |           |  |
| <b>Barrier Data</b>              |       |                         |                        |            |       |       |           |       |       |           |       |       |           |  |
| MVTR(38°C,90%RH)                 |       | g/(m <sup>2</sup> ·day) | F-1249                 | 6.0~8.8    |       |       | 4.0~6.5   |       |       | 2.5~4.0   |       |       | 1.2~2.6   |  |
| MVTR(10B,90%RH)                  |       | g/100i/day              |                        | 0.39~0.56  |       |       | 0.26~0.42 |       |       | 0.16~0.26 |       |       | 0.08~0.17 |  |

The values given in the above table are typical performance data for reference only.  
If you have special requirements for product performance indexes, please communicate with business manager.

## FOROP Advanced Materials Co., Ltd.

Address: No.166 Fuju Road, Yinxi Street, Fuqing City, Fuzhou City, Fujian Province, China

Email: sales@sino-forop.com | <https://sales.forop.com>

Update date:08/25