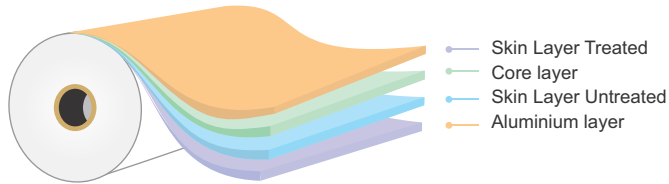


# BOPET-Metallized Film

## PAF-1(MO)

### Typical Values

### Structure



### Description

PAF-1 MO is a co-extruded, metallized BOPET film. Plasma Metallization on plain surface. The film have superior gloss when metallized on optically clear base film. The film is available with optical density ranging from 2.2 - 2.8. The metal bond between the metal and the film is minimum of 100 gm/inch, when plasma metallized on plain surface.

### Features

- Excellent gloss
- Good barrier properties
- Excellent for lamination and flexible packaging
- Excellent machinability & handling properties

### Applications

- Flexible packaging
- Lamination
- Decorative applications
- Duct insulation

| Properties                                                                                          | Ref.  | Units         | ASTM#/Test Method | PAF-1 (MO)                       |       |       |       |       |       |
|-----------------------------------------------------------------------------------------------------|-------|---------------|-------------------|----------------------------------|-------|-------|-------|-------|-------|
| Physical Data                                                                                       |       |               |                   |                                  |       |       |       |       |       |
| Average Thickness                                                                                   |       | micron        | D-374-C           | 8                                | 10    | 12    | 15    | 19    | 23    |
|                                                                                                     |       | gauge         |                   | 32                               | 40    | 48    | 60    | 76    | 92    |
|                                                                                                     |       | mils          |                   | 0.3                              | 0.4   | 0.5   | 0.6   | 0.7   | 0.9   |
| Density                                                                                             |       | g/cc          | D-1505            | 1.4                              | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   |
| Average Substance                                                                                   |       | g/m²          |                   | 11.2                             | 14.0  | 16.80 | 21.0  | 26.6  | 32.2  |
| Yield                                                                                               |       | m²/Kg         | D-4321            | 89.29                            | 71.43 | 59.52 | 47.62 | 37.59 | 31.06 |
|                                                                                                     |       | in²/lb        |                   | 62774                            | 50219 | 41849 | 33480 | 26431 | 21834 |
| Optical Data                                                                                        |       |               |                   |                                  |       |       |       |       |       |
| Optical Density<br>Tolerance +/- 5%<br>(*Customer to specify the OD value as per their application) | NB    |               | CTM               | 2.2 - Normal barrier application |       |       |       |       |       |
|                                                                                                     | MB    |               |                   | 2.5 - High barrier application   |       |       |       |       |       |
|                                                                                                     | HB    |               |                   | 2.8 - Special application        |       |       |       |       |       |
| Mechanical Data                                                                                     |       |               |                   |                                  |       |       |       |       |       |
| Tensile Strength (min.)                                                                             | MD    | kg/ cm²       | D-882             | 2000                             | 2000  | 2000  | 2000  | 2000  | 2000  |
|                                                                                                     | TD    |               |                   | 2100                             | 2100  | 2100  | 2100  | 2100  | 2100  |
| Elongation (min.)                                                                                   | MD    | %             | D-882             | 90                               | 100   | 105   | 110   | 115   | 120   |
|                                                                                                     | TD    |               |                   | 85                               | 90    | 90    | 90    | 90    | 95    |
| Thermal Data                                                                                        |       |               |                   |                                  |       |       |       |       |       |
| Linear Shrinkage (Max.)<br>(150°C/302 F, 30 min.)                                                   | MD    | %             | D-1204            | 2.0                              |       |       |       |       |       |
|                                                                                                     | TD    |               |                   | 0.4                              |       |       |       |       |       |
| Surface Data                                                                                        |       |               |                   |                                  |       |       |       |       |       |
| Surface tension (min.)                                                                              | MS    | dynes/cm      | D-2578            | 56                               |       |       |       |       |       |
| Kinetic COF (Max.)                                                                                  | MS/NM | -             | D-1894            | 0.7                              |       |       |       |       |       |
| Barrier Data                                                                                        |       |               |                   |                                  |       |       |       |       |       |
| MVTR (38 °C, 90%RH)                                                                                 |       | g/m²/day      | F-1249            | NB                               |       | MB    |       | HB    |       |
|                                                                                                     |       |               |                   | 1.2                              |       | 1.0   |       | 0.8   |       |
| MVTR (100 °F, 90%RH)                                                                                |       | g/100in²/day  |                   | 0.07                             |       | 0.06  |       | 0.05  |       |
| OTR (23 °C, 0%RH)                                                                                   |       | cc/m²/day     | D-3985            | 1.4                              |       | 1.2   |       | 1.0   |       |
| OTR (73 °F, 0%RH)                                                                                   |       | cc/100in²/day |                   | 0.09                             |       | 0.07  |       | 0.06  |       |

CTM : Cosmo Test Method MD : Machine Direction TD : Transverse Direction CT : Corona Treated CS : Coated Side UT : Untreated  
MS : Metal Side NM: Non-metal side

Note : PET film inherent surface tension is minimum 42 dynes/cm on untreated side

Storage & Handling : PET film needs to be stored in a warehouse below 35°C (95°F) and should not be exposed to direct sunlight, sources or high humidity.  
If the material is stored in the recommended conditions PET is suitable for use within 6 months from the date of dispatch.

Disclaimer : The information provided above is based on COSMO FILMS conclusive tests, which are indicative only and provided as guidelines.  
They do not constitute a guarantee of any specific product attributes or the suitability of products for specific applications.

### Cosmo Films

1st Floor, Uppal's Plaza, M-6 Jasola District Centre, New Delhi-110025, India, T: + 91-11-49 49 49 49,  
E-mail: sales.enquiry@cosmofilms.com | www.cosmofilms.com