

**Product Description:**

➤Base polyester is a specialized design for high adhesion when metalized

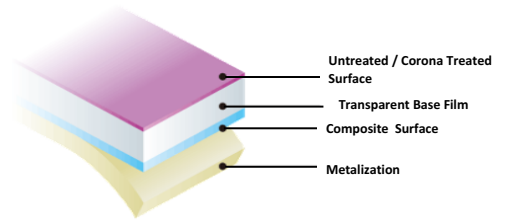
**Application:**

- Flexible packaging
- Lamination
- Hot fill applications up to 80°C .

**Key Features:**

- Excellent barrier properties
- High metal bond strength
- Good machinability & handling properties

PROVISIONAL ONLY

**Film Structure**


FLEXMETPROTECT™ F-HMB is a metalized polyester film. The film is either Untreated or Corona Treated on the other surface. The film is available with optical densities ranging from 2.6 to 3.0 giving the customer the ability to use for a diverse range of applications. The metalization is available on the plasma treated composite surface giving a bond strength between the metal and the film a minimum of 1000gm/25mm. This film grade is suitable for flexible packaging including hot fill applications up to 80C.

| PROPERTIES   | TEST METHOD (ASTM)   | UNIT   | TYPICAL VALUES                 |                                |                                  |                                |                                |
|--|----------------------|--|--------------------------------|--------------------------------|----------------------------------|--------------------------------|--------------------------------|
| <b>OPTICAL DENSITY***</b><br>(TOLERANCE: +/- 5%)<br>(***)Customer to specify the OD value as per their specification.) |                      |  |                                |                                |                                  |                                |                                |
|  |                      |  | <b>Very High Density (VHD)</b> |                                | <b>2.8 - Special Application</b> |                                |                                |
| THICKNESS  | Internal             | Micron (Gauge)   | 10<br>40                       | 12<br>48                       | 15<br>60                         | 19<br>76                       | 23<br>92                       |
| YIELD  |                      | m <sup>2</sup> /kg<br>in <sup>2</sup> /lb.             | 71.42<br>50318                 | 59.52<br>41934                 | 47.62<br>33550                   | 37.59<br>26483                 | 31.05<br>21876                 |
| SURFACE TENSION (range)<br>(Plain surface)<br>(Corona Treated surface)   | D-2578               | Dyne/cm  | 48-50<br>52-64                 |                                |                                  |                                |                                |
| COF (max)<br>(MI/MO)   | D-1894               | -  | 0.50                           |                                |                                  |                                |                                |
| TENSILE STRENGTH AT BREAK (min)  | MD<br>TD<br>MD<br>TD | Kg/cm <sup>2</sup><br><br>(Psi)                        | 1900<br>2000<br>27000<br>28500 | 1900<br>2000<br>27000<br>28500 | 1900<br>2000<br>27000<br>28500   | 1900<br>2000<br>27000<br>28500 | 1900<br>2000<br>27000<br>28500 |
| ELONGATION AT BREAK (min)  | MD<br>TD             | %  | 105<br>85                      | 105<br>85                      | 105<br>85                        | 110<br>85                      | 115<br>90                      |
| LINEAR SHRINKAGE (max)<br>(30 Minute at 150°C)   | MD<br>TD             | %  | 1.5<br>0.6                     |                                |                                  |                                |                                |
| Metal Adhesion   | Internal Method      | gf/Inch  | >1000                          |                                |                                  |                                |                                |
| GLOSS (min)<br>(Metalized surface)<br>(Bare surface)   | D-2578               | -  | 750<br>600                     |                                |                                  |                                |                                |
| MVTR (max)<br>(38°C & 90%RH)   | F-1249               | gm/m <sup>2</sup> /day<br>(gm/100in <sup>2</sup> /day) | VHD<br>0.5<br>0.03             |                                |                                  |                                |                                |
| OTR (max)<br>(23°C & 0%RH)   | D-3985               | cc/m <sup>2</sup> /day<br>(cc/100in <sup>2</sup> /day) | 0.5<br>0.03                    |                                |                                  |                                |                                |

Rev. Date: 3/8/2017

# The inherent surface tension of the untreated side of any PET film is a minimum of 42 dyne/cm.

MI - Metal Wound In / MO - Metal Wound Out

**STORAGE & HANDLING**

FLEXMETPROTECT™ needs to be stored in a warehouse below 35°C (95°F) and should not be exposed to direct sunlight, bright light sources, or high humidity. If the material is stored in the recommended conditions, FLEXMETPROTECT™ is suitable for use within 6 month from the date of manufacturing.

**FOOD CONTACT**

FLEXMETPROTECT™ complies with EU and FDA regulations on plastic materials used for food grade application. Specific documents and SDS are available on request.

**DISCLAIMER**

It is the responsibility of our customers to determine that their use of our product(s) is safe, lawful, and technically suitable in their intended applications. The values given in the technical data sheet represent typical values based on the best of our knowledge on the date when the data was compiled. It is offered solely to provide possible suggestions for your own experimentation and not as a guarantee for the material supplied. The user is solely responsible for the end use of the product and needs to perform their own tests to confirm the product suitability / compatibility in all respects. Flex Films (USA) Inc. gives no warranty nor accepts liability for any loss and fitness of the product for any specific purpose. Flex reserves the right to change the technical data sheet at any time for enhancing the quality of the products without prior information.