



# FLEXMETPROTECT™ F-WAP-M

## Technical Data Sheet

(METALLIZED POLYESTER FILM)

### Product Description:

FLEXMETPROTECT™ F-WAP-M is a White Opaque metallized polyester film having metallization on corona side and other side Untreated standard surface.

### Key Features:

Very Good Aesthetic appearance  
Good Stiffness

### Applications:

Lamination & Conversion  
Label application  
Board Lamination  
Confectionery & Snacks

FLEXMETPROTECT™ F-WAP-M grade of film is a White Opaque metallized polyester films. This grade of films have a White Opaque surface and thus gives a different aesthetic appeal of an Aluminum foil. It is available in optical density ranging from 1.4 to 3.0. The wide range of optical properties give choice to the customer to use the product for diverse range of applications. The metallization is available on plain side (MU) or on corona treated side (MT), as specified by the customer. The bond between the metal & film is 100-150gm/25mm (when metallized on plain side) & 130-180 gm/25mm (when metallized on corona side).

PROPERTIES	TEST METHOD (ASTM)	UNIT	TYPICAL VALUE		
			12	23	
<b>OPTICAL DENSITY**</b> (TOLERANCE : +/- 5%) (** Customer to specify the OD value as per their application)		-	<b>SD 2.2 - Normal Packaging Application</b> <b>HD 2.5 - Barrier Packaging Application</b> <b>VHD 2.8 - High Barrier Application</b>		
<b>THICKNESS</b>	<b>Internal</b>	<b>Micron</b>	<b>12</b>	<b>23</b>	
		<b>(Gauge)</b>	<b>48</b>	<b>92</b>	
<b>FILM DENSITY</b>	<b>D-1505</b>	<b>gm/cc</b>	<b>1.45</b>	<b>1.45</b>	
<b>GRAMMAGE</b>	<b>Internal</b>	<b>gm/m<sup>2</sup></b>	<b>17.4</b>	<b>33.4</b>	
<b>YIELD</b>	<b>Internal</b>	<b>m<sup>2</sup>/kg</b>	<b>57.47</b>	<b>29.98</b>	
		<b>in<sup>2</sup>/lb</b>	<b>40490</b>	<b>21122</b>	
<b>COEFF OF KINETIC FRICTION</b>	<b>D-1894</b>	<b>-</b>	<b>0.7</b>	<b>0.7</b>	
<b>METAL WOUND</b>			<b>MI/MO</b>	<b>MI/MO</b>	
<b>TENSILE STRENGTH AT BREAK</b>	<b>MD*</b>	<b>D-882</b>	<b>1700</b>	<b>1600</b>	
	<b>TD*</b>		<b>2000</b>	<b>2000</b>	
	<b>MD*</b>		<b>24200</b>	<b>22700</b>	
	<b>TD*</b>		<b>28500</b>	<b>28500</b>	
<b>ELONGATION AT BREAK</b>	<b>MD</b>	<b>D-882</b>	<b>110</b>	<b>115</b>	
	<b>TD</b>		<b>80</b>	<b>80</b>	
<b>LINEAR SHRINKAGE ( Max.)</b> (AT 105 <sup>0</sup> C/30 Minute)	<b>MD</b>	<b>D-1204</b>	<b>1.5</b>	<b>1.5</b>	
	<b>TD</b>		<b>0.6</b>	<b>0.6</b>	
<b>W.V.T.R.(38<sup>0</sup>C &amp; 90%RH)</b>	<b>F-1249</b>	<b>gm/m<sup>2</sup>/day</b>	<b>SD 1.0</b>	<b>HD 0.6</b>	<b>VHD 0.4</b>
		<b>(gm/100in<sup>2</sup>/day)</b>	<b>0.06</b>	<b>0.04</b>	<b>0.03</b>
<b>O.T.R. (23<sup>0</sup>C &amp; 0%RH)</b>	<b>D-3985</b>	<b>cc/m<sup>2</sup>/day</b>	<b>1.1</b>	<b>1.0</b>	<b>0.8</b>
		<b>(cc/100in<sup>2</sup>/day)</b>	<b>0.07</b>	<b>0.06</b>	<b>0.05</b>

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\*MD = MACHINE DIRECTION \*TD = TRANSVERSE DIRECTION

# MI = Metal wound inside, MO = Metal wound out side

SD- Standard Density, HD - High Density, VHD - Very High Density

### STORAGE & HANDLING

FLEXMETPROTECT™ need to be stocked in a closed warehouse and should not be exposed to direct sunlight or light sources and from humidity. It is recommended to store below 35° C in dry place. FLEXMETPROTECT™ is suitable for use within 6 months from date of manufacturing, only if stored in recommended condition.

### FOOD CONTACT

FLEXMETPROTECT™ complies with EC and FDA regulations. Specific document and MSDS are available on request.

### DISCLAIMER

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\*\*TDS issued on 06-10-2017.

Website: [www.flexfilm.com](http://www.flexfilm.com)