



**Product Description:**

FLEX METPROTECT™ B-TSV-M is a metallized BOPP film. It is one side metallized and other side corona treated film.

**Key Features:**

Excellent Machinability  
Superior Barrier properties  
Improved metal adhesion

**Applications:**

Sandwich Lamination  
Packaging of Ester bags.

PROPERTIES	TEST METHOD (ASTM)	UNIT	TYPICAL VALUE			
			15	18	20	
OPTICAL DENSITY** (TOLERANCE : +/- 5%)		-	2.2	2.2	2.2	
THICKNESS	Internal	Micron (Gauge)	15 60	18 72	20 80	
FILM DENSITY	D-1505	gm/cc	0.91	0.91	0.91	
GRAMMAGE	Internal	gm/m <sup>2</sup>	13.65	16.38	18.2	
YIELD	Internal	m <sup>2</sup> /kg in <sup>2</sup> /lb	73.26 51615	61.05 43012	55.49 39090	
TREATMENT LEVEL	D-2578	dyne/cm	36	36	36	
TENSILE STRENGTH AT BREAK	MD*	D-882	Kg/cm <sup>2</sup>  (Psi)	1200	1200	1200
	TD*			2500	2500	2500
	MD*			17000	17000	17000
	TD*			35500	35500	35500
ELONGATION AT BREAK	MD	D-882	%	160	160	160
	TD			60	60	60
	MD			17000	17000	17000
MODULUS OF ELASTICITY	TD	D-882	Kg/cm <sup>2</sup>  (KPsi)	30000	30000	30000
	MD			241.4	241.4	241.4
	TD			426	426	426
	MD			426	426	426
LINEAR SHRINKAGE (AT 130°C/5 Minute)	MD	D-1204	%	< 5.0		
	TD			< 3.0		
W.V.T.R.(38°C & 90%RH)	F-1249	gm/m <sup>2</sup> /day	1.1	1.0	1.0	
		(gm/100in <sup>2</sup> /day)	0.07	0.06	0.06	
O.T.R. (23°C & 0%RH)	D-3985	cc/m <sup>2</sup> /day	125	110	100	
		(cc/100in <sup>2</sup> /day)	8.0	7.0	6.5	

\*\* The film of high O.D. = 2.4 (Min.) is also available.

Ref no QAD UFLI S/14 - MB 3/1

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

**STORAGE & HANDLING**

FLEXMETPROTECT™ does not require special storage conditions. It is recommended to storage below 30°C in order to avoid any deterioration of the film surface properties. It is advisable to use the material on FIFO basis. The film should be kept at operating environment for 24 hours before processing. FLEXMETPROTECT™ is best suitable for use up to 3 months from date of dispatch.

**FOOD CONTACT**

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

**DISCLAIMER**

It is the responsibility of our customer 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 as on 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 Gives no warranty or accept 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.

\*\*TDS issued on 11-02-2015.All previous version of this grade are invalid.

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