



**Technical Data Sheet**

**(METALLIZED POLYESTER FILM)**

**Product Description:**

Base polyester having one side chemically coated and other side Untreated or Corona treated. It can be metallized on either side as per specified by the customer requirements.

**Key Features:**

Excellent Gloss  
Good Barrier Properties  
Excellent Machinability & handling properties

**Applications:**

Flexible Packaging  
Lamination  
Decorative application

FLEXMETPROTECT™ GRADE	BASE FILM	ONE SURFACE	OTHER SURFACE	METALIZATION SIDE
F-ATU-M	STANDARD	PLAIN	CHEMICAL COATING	Metallization will be either side ( i.e. On Corona or Untreated side) <b>TO BE SPECIFIED BY THE CUSTOMER</b>
F-ATT-M	STANDARD	CORONA	CHEMICAL COATING	
F-CLR-T-M	OPTICALLY CLEAR	PLAIN	CHEMICAL COATING	
F-CLR-T1-M	OPTICALLY CLEAR	CORONA	CHEMICAL COATING	
F-XLR-T-M	EXTRA CLEAR	PLAIN	CHEMICAL COATING	
F-XLR-T1-M	EXTRA CLEAR	CORONA	CHEMICAL COATING	

FLEXMETPROTECT™ above grades of films are metallised polyester film. The film have superior gloss when metallized on optically clear base film and further improved when metallized on extra clear base film The film is one side proprietary coated layer whereas other side is either plain or corona treated( see grades table above). Film is available in optical density ranging from 2.0 to 3.0.The wide range of optical densities give choice to the customer to use the product for diverse range of applications. The metallization is available on plain side (MU),corona treated side (MT) or on coated side (MC), as specified by the customer. The bond between the metal & film is 100-150gm/25mm (when metallized on plain side),130-180 gms/25mm (when metallized on corona or coated surface), Film is suitable for flexible packaging including pasteurization application.

PROPERTIES	TEST METHOD (ASTM)	UNIT	TYPICAL VALUE		
			12	23	36
OPTICAL DENSITY*** (TOLERANCE : +/- 5%) ( *** Customer to specify the OD value as per their specification )			SD	2.2 - Barrier Packaging Application	
			HD	2.5 - High Barrier Application	
			VHD	2.8 - Special Application **	
THICKNESS	Internal	Micron (Gauge)	12	23	36
FILM DENSITY	D-1505	gm/cc	48	92	144
GRAMMAGE	Internal	gm/m <sup>2</sup>	1.4	1.4	1.4
YIELD	Internal	m <sup>2</sup> /kg	16.8	32.2	50.4
		in <sup>2</sup> /lb	59.52	31.05	19.8
COEFF OF KINETIC FRICTION	D-1894	-	41934	21876	13978
METAL WOUND			0.7	0.7	0.7
			TI/TO	TI/TO	TI/TO
TENSILE STRENGTH AT BREAK	MD*	Kg/cm <sup>2</sup>	1900	1900	1750
	TD*		2000	2000	2000
	MD*	(Psi)	27000	27000	25000
	TD*		28500	28500	28500
ELONGATION AT BREAK	MD	%	105	115	120
	TD		85	90	90
LINEAR SHRINKAGE (Max.) (AT 105°C/30 Minute)	MD	%	1.5	1.5	1.5
	TD		0.6	0.6	0.6
W.V.T.R.(38°C & 90%RH)	F-1249	gm/m <sup>2</sup> /day (gm/100in <sup>2</sup> /day)	SD	HD	VHD
			1.0	0.6	0.4
O.T.R. (23°C & 0%RH)	D-3985	cc/m <sup>2</sup> /day (cc/100in <sup>2</sup> /day)	0.06	0.04	0.03
			1.1	1.0	0.8
			0.07	0.06	0.05

Ref no QAD UFLI S/14 - MF 4/1

\*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 stored 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**

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)