

**Technical Data Sheet****(METALLIZED POLYESTER FILM)****Product Description:**

Polyester film having metal deposit layer on one side and other side untreated standard surface

Key Features:Excellent Gloss
Good Barrier Properties
Excellent Machinability & handling properties**Applications:**Flexible Packaging
Lamination
Duct Insulation
Decorative application

FLEXMETPROTECT™ GRADE	BASE FILM	ONE SURFACE	OTHER SURFACE	METALLIZATION SIDE
F-MTG-M	STANDARD	PLAIN	PLAIN / CORONA	Metallization will be either side
F-CLR-M	OPTICALLY CLEAR	PLAIN	PLAIN / CORONA	(i.e. On corona or Untreated side)
F-XLR-M	EXTRA CLEAR	PLAIN	PLAIN / CORONA	TO BE SPECIFIED BY CUSTOMER

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. Film is available in optical density ranging from 1.4 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) 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 gms/25mm (when metallized on corona side).

PROPERTIES	TEST METHOD (ASTM)	UNIT	TYPICAL VALUE						
			9	10	12	15	19	23	
OPTICAL DENSITY*** (TOLERANCE : +/- 5%) (*** Customer to specify the O.D.value as per their application)			SD HD VHD	2.2 - Normal Packaging Application 2.5 - High Barrier Application 2.8 - Special Application					
THICKNESS	Internal	Micron (Gauge)	9 36	10 40	12 48	15 60	19 76	23 92	
FILM DENSITY	D-1505	gm/cc	1.4	1.4	1.4	1.4	1.4	1.4	
GRAMMAGE	Internal	gm/m ²	12.6	14	16.8	21.0	26.6	32.2	
YIELD	Internal	m ² /kg in ² /lb	79.36 55912	71.42 50318	59.52 41934	47.62 33550	37.59 26483	31.05 21876	
COEFF OF KINETIC FRICTION METAL WOUND	D-1894	-	0.7 # MI/MO	0.7 MI/MO	0.7 MI/MO	0.7 MI/MO	0.7 MI/MO	0.7 MI/MO	
TENSILE STRENGTH AT BREAK	MD*	D-882	Kg/cm ² (Psi)	1900	1900	1900	1900	1900	1900
	TD*			2000	2000	2000	2000	2000	2000
	MD*			27000	27000	27000	27000	27000	27000
	TD*			28500	28500	28500	28500	28500	28500
ELONGATION AT BREAK	MD	D-882	%	90	100	105	105	110	115
	TD			80	80	85	85	85	90
LINEAR SHRINKAGE (Max.) (AT 105°C/30 Minute)	MD	D-1204	%	1.5	1.5	1.5	1.5	1.5	1.5
	TD			0.6	0.6	0.6	0.6	0.6	0.6
W.V.T.R.(38°C & 90%RH)	F-1249	gm/m ² /day (gm/100in ² /day)	SD			HD		VHD	
			1.0			0.6		0.4	
			0.06			0.04		0.03	
O.T.R. (23°C & 0%RH)	D-3985	cc/m ² /day (cc/100in ² /day)	1.1			1.0		0.8	
			0.07			0.06		0.05	

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

*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