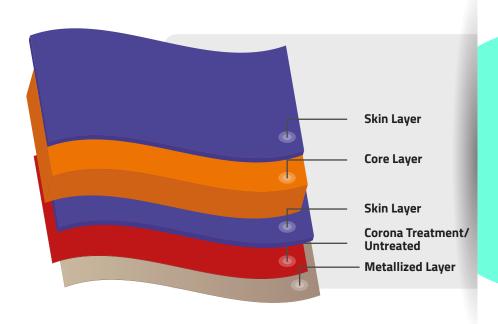


F-MTG-M, F-CLR-M, F-XLR-M METALLIZED FILMS

Metallized Films are BOPET films with either both sides Untreated or one side Untreated with the other side Corona Treated. The films have superior gloss when metallized on optically clear base film, and further improved gloss when metallized on extra clear base film (see grades table). These films are available in optical densities ranging from 1.4 to 3.0; this wide range gives options to the customer to use the product for a diverse range of applications. The metallization is available on the Untreated surface (MU) or on the Corona Treated surface (MT) as specified by the customer. The bond between the metal & film is a minimum of 100 gm/25mm when metallized on the Untreated surface & a minimum of 130 gm/25mm when metallized on the Corona Treated surface.



FILM STRUCTURE

KEY FEATURES:

- Excellent gloss
- Good barrier properties
- Excellent machinability & handling properties

APPLICATION:

- Flexible Packaging
- Duct insulation
- Lamination
- Decorative applications



FLEXMETPROTECT™ GRADE	BASE FILM		ONE SURFACE		OTHER SURFACE			METALIZATION SIDE					
F-MTG-M F-CLR-M F-XLR-M	STANDARD OPTICALLY CLEAR EXTRA CLEAR		PLAIN PLAIN PLAIN			CORONA / PLAIN CORONA / PLAIN CORONA / PLAIN			Metallization will be on either the Untreated or Corona Treated surface. TO BE SPECIFIED BY THE CUSTOMER.				
PROPERTIES	TEST METHOD	UNIT		TYPICAL VALUES									
OPTICAL DENSITY*** (TOLERANCE: +/- 5%) (***Customer to specify the OD value as per their specification.)				Standard Density (SD) 2.2 - Barrier Packaging Application High Density (HD) 2.5 - High Barrier Application Very High Density (VHD) 2.8 - Special Application									
THICKNESS	Internal	Micron	9	10	11	12	15	19	21	23	36	50	
		(Gauge)		40	44	48	60	76	84	92	144	200	
YIELD	Internal	m² / kg		-	64.93	59.52	47.62	37.59	34.01	31.05	19.84		
		in² /lb	5591	2 50318	45745	41934	33550	26483	23951	21876	13978	10060	
SURFACE TENSION (min) # ★ (Corona surface)	ASTM D-2578	dyne/cm	1	52									
COF (max) (One side to the other side)	ASTM D-1894	-		0.70									
TENSILE STRENGTH AT BREAK (min) MD MD TD	ASTM D-882	kg/cm²	1900 2000	2000	1900 2000	1900 2000	1900 2000	1900 2000	1900 2000	1900 2000	1750 2000	1750 2000	
		(Psi)	2700		27000		27000		27000	27000	25000		
			2850					28500		28500	28500	_	
ELONGATION AT BREAK (min)	ASTM D-882	%	90	100	100 85	105 85	105 85	110 85	110 85	115 90	120 90	125 95	
LINEAR SHRINKAGE (max) MD			80	1.5									
LINEAR SHRINKAGE (max) MD (30 Minute at 105°C) TD	ASTM D-1204	%		0.6									
GLOSS (min) (Metallized surface) (Bare surface)	ASTM D-2457	-		STANDA	ARD	(OPTICALLY CLEAR			EXTRA CLEAR			
				800				320		850			
(Daie Suitace)				600			700			750			
	ASTM F-1249	(3/1		SD			HD 0.6			VHD			
MVTR (38° C & 90% RH) (typical)		gm/m²/da (gm/100 in²/		1.0 0.06				0.6		0.4			
OTR (23°C & 0% RH) (typical)	ASTM D-3985	cc/m²/da		1.1				1.0		0.8			
		(cc/100 in²/	<i>'</i>	0.07			0.06			0.05			

[★] This dyne value is applicable only for NAFTA, SA, and Poland manufacturing plants

STORAGE & HANDLING

FLEXMETPROTECTTM 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, FLEXMETPROTECTTM is suitable for use within 180 days from the date of shipment.

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 customer to determine that their use of our products is safe, lawful, and technically suitable in their intended applications. The technical data sheets are provided for discussion purposes only. The customer may not rely on the data provided for any manufacturing purpose. The values provided in the technical data sheet represent typical values based on the best of our knowledge as of the date when the data was compiled. The data is offered solely to provide possible sor 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 provides no warranty and accepts no liability for any loss or fitness of the product for any specific purpose based on the information contained in the technical data sheets. Flex reserves the right to change the technical data sheet at any time without prior notice.



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