

FLEXMETPROTECT<sup>™</sup> F-PCR-M TECHNICAL DATA SHEET BIAXIALLY ORIENTED METALLIZED POLYESTER FILM

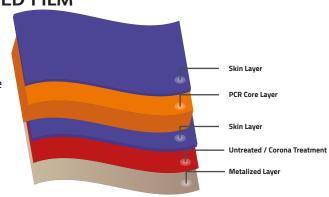
FILM STRUCTURE

# **F-PCR-M** POST CONSUMER RECYCLED CONTENT METALLIZED FILM

F-PCR-M grade of Metallized BOPET film is manufactured by using the raw material containing 25%-90% of post consumer recycled PET resin. It is available & optical density ranging from 2.0 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 side (MT), as specified by the customer. The bond between the metal and the film are as follows-metallized on Untreated film-100 gm/25mm, metallized on corona surface-130 gm/25mm.

## **KEY FEATURES:**

- Good Optical properties
- Good Metal Adhesion
- Excellent Machinability & Dimensional
- stability



## **APPLICATION:**

- Flexible Packaging
- Lamination
- Duct Insulation

PROPERTIES		TEST METHOD	UNIT	TYPICAL VALUES					
OPTICAL DENSITY*** (TOLERANCE : +/- 5%) (*** Customer to specify the O.D. value as per their application )				SD: 2.2 - Normal Packaging Application HD: 2.5 - High Barrier Application VHD: 2.8 - Special Application					
THICKNESS		Internal	Micron	12	15	19		23	36
		internal	(Gauge)	48	60	76	92		144
YIELD		Internal	m² / kg	59.52	47.62	37.59	31.05		19.84
			in² /lb	41934	33550	26483	21876		13978
COF (max) One side to the other side		ASTM D-1894	-	0.70	0.70	0.70	0.70		0.70
TENSILE STRENGTH AT BREAK (min)	MD		kg/cm²	1800	1800	1800		1700 17	
	TD	ASTM D-882		1900	1900	1900		1900	2000
	MD		(Psi)	25500	25500	25500	24200		24200
	TD			27000	27000	27000	27000		27000
ELONGATION AT BREAK	MD	ASTM D-882	%	105	105	110	120		120
(min)	TD			85	85	85	90		90
LINEAR SHRINKAGE (max)	MD	ASTM D-1204	%	1.5					
(30 Minute at 105℃)	TD			0.6					
WVTR (38°C & 90%RH) (typical)				SD		HD		VHD	
		ASTM F-1249	gm/m²/day	1.0		0.6		0.4	
			(gm/100in²/day)	0.06		0.04		0.03	
OTR (23°C & 0%RH) (typical)		ASTM D-3985	cc/m²/day	1.1		1.0		0.8	
			(cc/100in²/day)	0.07		0.06		0.05	

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

#### **STORAGE & HANDLING**

FLEXMETPROTECT<sup>™</sup> 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, FLEXMETPROTECT<sup>™</sup> is suitable for use within 180 days from the date of shipment.

### FOOD CONTACT

FLEXMETPROTECT<sup>TM</sup> 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 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 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.

# FlexFilms

Manufacturing Facilities at India | UAE | Poland | Egypt | Mexico | USA | Hungary | Russia | Nigeria ⊠ enquiry@flexfilm.com ⊕ www.flexfilm.com

#### Ref. No: QAD UFLI S/20 - MF47/1 \*\* TDS issued on 01-04-2020. All previous version of this grade are invalid.