

FILM STRUCTURE

# F-HSP-M METALLIZED HEAT SEALABLE FILM

Base polyester is one side Heat Sealable with the other side being Untreated or Corona Treated. F-HSP-M is a metallized BOPET film having improved barrier properties. The film is excellent for tack seal applications and is available in optical densities ranging from 2.2 to 2.8. The metallization is available on either the Untreated (MU) or Corona Treated (MT) surface metallized as specified by the customer. The bond strength between the metal and the film is a minimum of 100gm/25mm when metallized on the Untreated surface & a minimum of 130gm/25mm when metallized on the Corona Treated surface.

**KEY FEATURES:** 

- Improved barrier properties
- Sealable surface seals to
- APET, CPET, & PVDC
- Excellent handling
- properties

## **APPLICATION:**

- Tack seal
- Single layer PET bags
- Food tray sealing

PROPERTIES	TEST METHOD	UNIT	TYPICAL VALUES			
			Standard Density (SD) 2.2 - Barrier packaging application			
OPTICAL DENSITY***(TOLERANCE: +/- 5%) (***Customer to specify the OD value as			High Density (HD) 2.5 - High barrier application Very High Density (VHD) 2.8 - Special application			
per their specification.)						
THICKNESS	Internal	Micron	12	15	20	23
		(Gauge)	48	60	80	92
YIELD	Internal	m² / kg	59.52	47.62	35.70	31.05
		in² /lb	41934	33550	25159	21876
SURFACE TENSION (min) # 🖈 (Corona Treated Surface)	ASTM D-2578	dyne/cm	52			
COF (max) One side to the other side	ASTM D-1894	-	0.70			
TENSILE STRENGTH AT BREAK (min)	ASTM D-882	kg/cm²	1700	1700	1600	1600
			1900	1900	2000	2000
		(Psi)	24200	24200	22700	22700
			27000	27000	28500	28500
ELONGATION AT BREAK (min)	ASTM D-882	%	115	115	120	120
			85	85	90	90
LINEAR SHRINKAGE (max) M (30 Minute at 105°C) TI	– ASTM D-1204	%	1.5			
			0.6			
MVTR (38°C & 90%RH) (typical)	ASTM F-1249	am (m² (da))			VHD	
		gm/m²/day (gm/100 in²/day)	1.0 0.06		0.6	0.4
	ASTM D-3985	cc/m²/day	1.1	-	1.04	0.03
OTR (23°C & 0% RH) (typical)		(cc/100 in <sup>2</sup> /day)	0.07		0.06	0.8

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

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

### **STORAGE & HANDLING**

FLEXMETPROTECT<sup>M</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™ is suitable for use within 270 days from the date of shipment.

## **FOOD CONTACT**

FLEXMETPROTECT<sup>M</sup> complies with EU and FDA regulations on plastic materials used for food grade applications. 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

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### Ref. No: QAD UFLI S/20 - MF 21/1 \*\* TDS issued on 14-10-2021. All previous version of this grade are invalid.

Heat Sealable Layer (Untreated) Core Layer Skin Layer Untreated / Corona Treatment

Metallized Layer