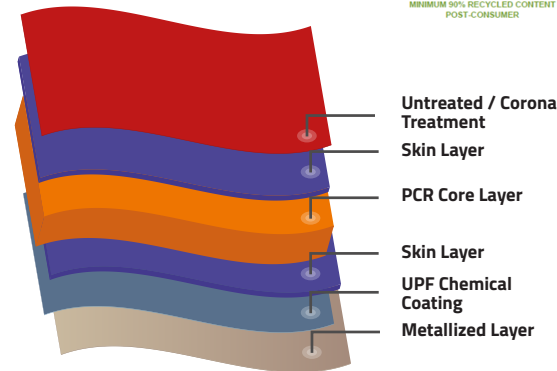


R-UPF-M METALLIZED PCR BASED FILM

Base polyester is one side Untreated or Corona Treated with the other side being UPF Chemical Coated. R-UPF-M is a metallized BOPET film. The film is one side UPF Chemical coated whereas the other side is Untreated or Corona Treated. The film is metallized on the UPF Chemical coated surface for the highest barrier and bond. Film is available in optical densities ranging from 2.2 to 2.8; this wide range gives options to the customer to use the product for a diverse range of applications. The bond between the metal & film is a minimum of 600gm/25mm when metallized on the UPF Chemical Coated surface. This Data Sheet applies to all PCR content levels (30, 50, 90, and 100%).

FILM STRUCTURE



KEY FEATURES:

- Excellent gloss
- Good barrier properties
- Excellent machinability & handling properties
- Good metal bond property
- Post Consumer Recycle content for a low carbon footprint (all% PCR)

APPLICATION:

- Flexible Packaging
- Laminations (Solventless and Extrusion)
- Hot fill, application up to 100°C (212°F)

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	12	15	19	23	
			(Gauge)	48	60	76	92	
YIELD		Internal	m ² / kg	59.52	47.62	37.59	31.05	
			in ² /lb	41934	33550	26483	21876	
SURFACE TENSION (min) # ★ (UPF Chemical Coated Surface) (Corona Treated surface)		ASTM D-2578	Dyne/cm	48				
				52				
COF (max) (MI/MO)		ASTM D-1894	-	0.70				
TENSILE STRENGTH AT BREAK (min)		ASTM D-882	kg/cm ²	MD	1900	1900	1900	1900
				TD	2000	2000	2000	2000
			(Psi)	MD	27000	27000	27000	27000
				TD	28500	28500	28500	28500
ELONGATION AT BREAK (min)		ASTM D-882	%	MD	105	105	110	115
				TD	85	85	85	90
LINEAR SHRINKAGE (max) (30 Minute at 105°C)		ASTM D-1204	%	1.5				
				0.6				
MVTR (38°C & 90% RH) (typical)		ASTM F-1249	gm/m ² /day (gm/100 in ² /day)	SD	HD	VHD		
				1.0	0.6	0.4		
OTR (23°C & 0% RH) (typical)		ASTM D-3985	cc/m ² /day (cc/100 in ² /day)	0.06	0.04	0.03		
				1.1	1.0	0.8		
				0.07	0.06	0.05		

* 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™ 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 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 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.

Ref. No: QAD UFLI S/20 - MF40/1

** TDS issued on 01-04-2020. All previous version of this grade are invalid.

FlexFilms

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