

R-IST-M PCR BASED METALLIZED ISOTROPIC FILM

Base polyester is one side Untreated with the other side Corona Treated or both sides Untreated. R-IST-M is a Metallized BOPET film having improved barrier properties supported with excellent lidding properties. The film is widely accepted for various types of lidding 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 surface (MT) 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. This Data Sheet applies to all PCR content levels (30, 50, 90, and 100%).

FILM STRUCTURE Skin Layer PCR Core Layer Skin Layer Untreated / Corona Treatment Metallized Layer

KEY FEATURES:

- Improved barrier properties
- Balanced mechanical properties in all directions
- Excellent machinability & handling properties
- Post Consumer Recycle content for a low carbon footprint (all % PCR)

APPLICATION:

- Lidding
- Dairy products
- Paper Laminated for lidding

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	19	23	36
			(Gauge)	48	76	92	144
YIELD		Internal	m² / kg	59.52	37.59	31.05	19.84
			in² /lb	41934	26483	21876	13978
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)	MD	- ASTM D-882	kg/cm²	1800	1800	1800	1700
	TD			1900	1900	1900	1900
	MD		(Psi)	25500	25500	25500	24200
	TD			27000	27000	27000	27000
ELONGATION AT BREAK (min)	MD	ASTM D-882	% -	110	115	120	130
	TD			95	95	100	100
LINEAR SHRINKAGE (max)	MD	ASTM D-1204	%	1.5			
(30 Minute at 105°C)	TD			0.6			
MVTR (38° C & 90% RH) (typical)				SD HD VHD			
		ASTM F-1249	gm/m²/day	1.0		0.6	0.4
			(gm/100 in²/day)	0.06	C	.04	0.03
OTR (23°C & 0% RH) (typical)		ASTM D-3985	cc/m²/day	1.1		1.0	0.8
			(cc/100 in²/day)	0.07	C	.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

FLEXMETPROTECTTM 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.

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