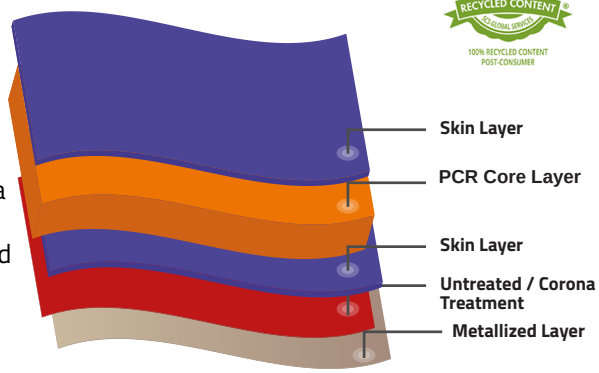
R-IST-M

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



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	m^2 / kg	59.52	37.59	31.05	19.84
			in^2 /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/cm^2	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) (30 Minute at 105°C)	MD	ASTM D-1204	%	1.5			
	TD			0.6			
MVTR (38° C & 90% RH) (typical)		ASTM F-1249		SD	HD	VHD	
			gm/m^2/day	1.0	0.6	0.4	
			(gm/100 in^2/day)	0.06	0.04	0.03	
OTR (23° C & 0% RH) (typical)		ASTM D-3985	cc/m^2/day	1.1	1.0	0.8	
			(cc/100 in^2/day)	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

Ref. No: QAD UFLI S/25 - F/Aug-25/P
**** TDS issued on 22-08-2025.**

FlexFilms
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