

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

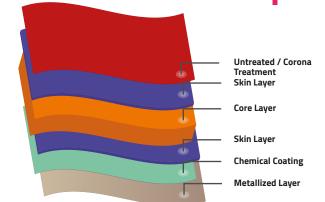
FILM STRUCTURE

# **F-ISC-M** METALLIZED CHEMICAL ISOTROPIC FILM

Base polyester is one side Untreated or Corona Treated with the other side being Chemical Coated. F-ISC-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 the Chemical Treated surface (MC). The bond strength between the metal and the film is a minimum of 500gm/25mm when metallized on the Chemical Coated surface.

# **KEY FEATURES:**

- Improved barrier properties
- Balanced mechanical properties in
- all directions
- Excellent machinability & handling
- properties



## **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		
		internar	(Gauge)	48		
YIELD		Internal	m² / kg	59.52		
			in² /lb	41934		
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 <sup>2</sup>	1800		
	TD		kg/cm-	1900		
	MD		(Psi)	25500		
	TD			27000		
ELONGATION AT BREAK	MD	ASTM D-882	%	110		
(min)	TD			95		
LINEAR SHRINKAGE (max) (30 Minute at 105°C)	MD	ASTM D-1204	%	1.5		
	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/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

★ 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>TM</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>TM</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.

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