IMPAK FILMS US, LLC

TECHNICAL DATA SHEET

BIAXIALLY ORIENTED, METALLIZED NYLON

IMP450



Vacuum deposited Aluminum layer Biaxially Oriented Nylon Film

Biaxially oriented nylon film, metallized for decorative applications

PRODUCT FEATURES

- · High impact strength and flexibility
- · High gloss and reflectivity
- · Suitable for use in a wide range of temperature applications

APPLICATIONS

- Suitable for use in many non-food applications such as packaging of objects with hard or sharp edges.
- Suitable for use in laminations
- Used in the manufacture of printed, metallized helium balloons •

PROPERTIES		TEST METHOD	UNITS	IMP450	IMP450
GENERAL					
Thickness		ASTM D374	ga	60	100
Density		ASTM D-792	g/cm²	1.14	1.14
Yield		ASTM D-4321	lb/ream	10.5	17.5
		ASTM D-4321	in²/lb	41100	24700
Treatment	Metal side	ISO8296	dynes/cm	50	50
OPTICAL					
Optical Density		X-rite 361		2.2	2.2
SURFACE					
COF	Metal side	ASTM D-1894		<0.80	<0.80
	Film side	ASTM D-1894		<0.80	<0.80
MECHANICAL					
Tensile Strength (at break)	MD	ASTM D-882	Psi	>26000	>26000
	TD	ASTM D-882	Psi	>26000	>26000
Elongation to Break	MD	ASTM D-882	%	< 180	< 180
	TD	ASTM D-882	%	<180	<180
THERMAL					
Shrinkage (320°C/5min)	MD	ASTM D-1204	%	< 3.0	< 3.0
	TD	ASTM D-1204	%	< 3.0	< 3.0
BARRIER					
Oxygen Transmission Rate	(73°F/0% RH)	ASTM F-1927	cc/m²/24h	1.65	1.65
Water Vapor Transmission Rate	(100°F/0% RH)	ASTM F-1249	gm/m²/24h	0.05	0.05

Guidelines for storage

High moisture is the primary cause of processing problems, so significant attention should be paid to the following advice:

1. The film is specially wrapped to exclude moisture and this should be preserved if film is stored. Do not open wrapping until rolls are being used.

2. If a part roll remains after use, it must be immediately re-sealed in aluminum foil wrapping to exclude moisture in storage.

3. Nylon film must be dry to be printable. Film which has not been stored correctly will show inferior ink key and adhesion properties.

4. Film should be printed in a dry, non-humid environment to avoid the film curling and taking up moisture.

FDA Compliance: For information regarding food contact compliance, please contact your Impak Films representative

Information in this publication refers to typical values of laboratory tests on samples from standard production. It is believed to be accurate and is given in good faith, but it is for the customer to satisfy themselves of the suitability of the material for their specific application. Accordingly, Impak Films gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that such exclusion is prevented by law. This document is not a product specification. Impak Films reserves the right to change the data sheet at any time without prior notification.

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