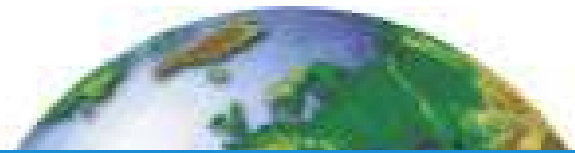


# 2DEFN Direct Extrudable Film



PRODUCT BULLETIN

## Description

Hostaphan® 2DEFN polyester film is chemically primed on one side for direct extrusion with a variety of extrusion coating resins. It combines high strength and flexibility, good dimensional stability and excellent chemical resistance.

## Performance

Hostaphan® 2DEFN film is designed for direct extrusion with a variety of extrusion coating resins. The unique chemistry of the chemical primer allows extrusion coating without corona treating or additional priming and can yield destruct bonds to many resins. This film is used in hot nip laminating and extrusion coating applications.

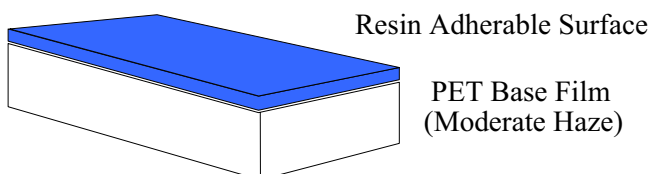
## FDA Status

The chemically primed surface of 2DEFN cannot be used in direct food contact. A functional barrier between this surface and any food is required. The plain side of 2DEFN can be used for direct food contact applications subject to limitations found in 21 CFR 177.1630. Contact your Mitsubishi Polyester Film Sales Representative for more information.

## Benefits

- No corona treating or additional priming needed prior to extrusion coating with many resins
- Stronger and more uniform bond than with some primers
- Reduction of solvent emissions and residuals by elimination of primers
- Reduced resin odors at lower extrusion temperatures
- Improved hot nip laminating bonds
- Standard gauge: 48

## Schematic of Hostaphan® 2DEFN



## Typical Properties of Hostaphan® 2DEFN Film

The Hostaphan® 2DEFN property values below are typical measurements. Further guidance on series selection, functional behavior by end use, film processing, standard roll configuration and gauges is available through a Mitsubishi Polyester Film Sales Representative.

Property		Unit of Measure		Typical Value*	Test Method
Area Yield	48 ga.	in <sup>2</sup> •mil/lb m <sup>2</sup> •mm/kg		19,800 717	ASTM D 4321
Tensile Strength	MD	psi kg/cm <sup>2</sup>		32,000 2,250	ASTM D 882
Yield Strength (F5)	MD	psi kg/cm <sup>2</sup>		15,000 1,050	ASTM D 882
Ultimate Elongation	MD	%		105	ASTM D 882
Modulus	MD	psi kg/cm <sup>2</sup>		600,000 42,200	ASTM D 882
Coefficient of Friction A/B	Static	--		0.43	ASTM D 1894
	Kinetic	--		0.40	
Shrinkage	MD	%		2.5	30 min. at 150°C
	TD			0.8	
Tear Strength (Propagating)		g	48 ga.	9	ASTM D 1922
Burst Strength		psi	48 ga.	80	ASTM D 774
Moisture Vapor Transmission Rate		g /100 in <sup>2</sup> •24 hr	48 ga.	3.7	ASTM E 96 @ 90% rh, 100°F
		g /m <sup>2</sup> •24 hr		57	
Oxygen Transmission Rate		cc /100 in <sup>2</sup> •24 hr•atm	48 ga.	9.1	ASTM D 3985
		cc /m <sup>2</sup> •24hr•atm		141	
Density		g/cm <sup>3</sup>		1.395	ASTM D 1505
Total Haze*		%	48 ga.	<2.7	ASTM D-1003
Surface Energy			coated side	approx. 60	Internal test (contact angle)

\* Values for reference data only. Contact a Mitsubishi Polyester Film Sales Representative for actual gauges available.  
Approved ZL 12/08



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