

Mitsubishi Chemical America, Inc.

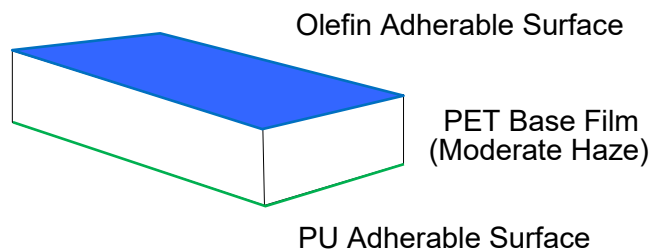
Description

Hostaphan® 2PAUN polyester film is chemically primed for adhesion to polyolefins on one side and for adhesion to polyurethanes on the other. This clear bonding film combines high strength and flexibility with good dimensional stability and excellent chemical resistance.

Performance

Hostaphan® 2PAUN film is designed for thermal lamination or extrusion coating with polyolefins. The olefin adherable primed surface develops outstanding adhesion to polypropylene and linear low density polyethylene (LLDPE). The opposite side of this film is chemically primed for enhanced adhesion to engineering adhesives, particularly MDI or TDI-based polyurethanes. This film is used in hot nip lamination and extrusion coating for industrial laminations.

Schematic of Hostaphan® 2PAUN



Benefits

- Outstanding adhesive bond after thermal lamination to LLDPE or polypropylene
- Bond strength is not degraded by exposure to heat and moisture.
- Moderate adhesion to LDPE and mild adhesion to HDPE. Polyethylene blends can tune bond strength for peelable laminations
- No corona, atmospheric treatment, or additional priming required prior to extrusion coating or lamination.
- Polyurethanes form a destruct bond to the adhesion promoting primer
- Typical thickness 0.92 mil (23µm) and 1.42 mil (36 µm)

FDA Status

The olefin adherable primed side of Hostaphan® 2PAUN can be used for direct food contact applications subject to limitations found in 21 CFR 177.1630 and in accordance with good manufacturing practices. For more information, contact your Polyester Film Sales Representative.

Typical Properties of Hostaphan® 2PAUN Film

The Hostaphan® 2PAUN 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	0.92 mil (23 µm)	ft ² /lb m ² /kg	149.5 30.6	ASTM D 4321
	1.42 mil (50 µm)	ft ² /lb m ² /kg	96.8 19.8	
Tensile Strength	MD	psi kg/cm ²	28,000 1,980	ASTM D 882
Yield Strength (F5)	MD	psi kg/cm ²	15,000 1,050	ASTM D 882
Ultimate Elongation	MD	%	120	ASTM D 882
Modulus	MD	psi kg/cm ²	500,000 35,200	ASTM D 882
Coefficient of Friction A/B	Static	--	0.35	ASTM D 1894
	Kinetic	--	0.32	
Shrinkage	MD	%	3.0	30 min. at 190°C
	TD		0.4	
Density		g/cm ³	1.395	ASTM D 1505
Total Haze*	0.92 mil (12 µm)	%	3.5	ASTM D-1003
	1.42 mil (50 µm)		5.0	
Surface Energy		dynes/cm	Olefin adherable PU adherable ~30 ~58	Water Contact Angle (EoS Model)
Peel Strength from Polypropylene		lbf/inch g/inch	> 6.5 >3000	ASTM D-903 (180° Peel)
Peel Strength from LLDPE		lbf/inch g/inch	> 6.5 >3000	ASTM D-903 (180° Peel)
Peel Strength from LDPE		lbf/inch g/inch	0.85 390	ASTM D-903 (180° Peel)
Peel Strength from HDPE		lbf/inch g/inch	0.25 120	ASTM D-903 (180° Peel)

* Values for reference data only. Contact a Mitsubishi Polyester Film Sales Representative for actual gauges available.

Approved MG 1/2021

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