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PET Flat Laminate (1D) Ultra-Gloss Technical Data

Product Description:

Polyethylene Terephthalate (PET) flat, 1D laminates is a solid or wood-grained decorative PET foil. Film are made with the highest quality materials, intended use is for flat lamination.

Chemical Composition:

- 90% - 93% Copoylester
- 2% - 3% Acrylate
- 2% - 3% Pigments
- 1% Complex stabilizer and additives

Product Dimensions:

Overall Width:	1270mm
Usable Width:	1270mm
Thickness:	0.5mm (20 mil)
Roll Length:	200 meters

Test	Effect	Data	Reference
Abrasion resistance (mg)	NE	10↓	Cf1. HCJ-D-204-3
Heat & Cold Repetition Test	NE	OK	Cf2. HCJ-D-204-4
Heat Resistance	NE	OK	Cf7. HCJ-D-204-9
Whitening by Folding	NE	OK	Cf8. HCD-D-204-9
Water Resistance	NE	OK	Cf9. HCJ-D-204-10
Heat & Humidity Resistance	NE	OK	Cf10. HCJ-D-204-13

		Unit	Spec	Data	Reference
Tensile Strength	(MD)	Kgf/mm²	3.0 ↑	6.15	JIS-K-6734
	(CD)		3.0 ↑	6.06	
Tear Strength	(MD)	Kgf/mm²	5.0 ↑	5.88	JIS-K-6732
	(CD)		5.0 ↑	6.69	
Elongation	(MD)	%	1.0 ↑	5.88	JIS-K-6734
	(CD)		1.0 ↑	6.69	

Stain & Chemical Resistance:

Reagent	Effect	Reference
1 % NaCO3	NE	Cf3. HCJ-D-204-5
5%CH3COOH	NE	Cf3. HCJ-D-204-5
1%HCl	NE	Cf3. HCJ-D-204-5
Petroleum Benzene	NE	Cf3. HCJ-D-204-5
Coffee	NE	Cf4. HCJ-D-204-6
Soy Sauce	NE	Cf4. HCJ-D-204-6
Worcestershire Sauce	NE	Cf4. HCJ-D-204-6
Black Marker	NE	Cf5. HCJ-D-204-6
Red Cryaon	NE	Cf5. HCJ-D-204-6
Petroleum Benzene	NE	Cf6. HCJ-D-204-7
Laquer	NE	Cf6. HCJ-D-204-7
95% Ethanol	NE	Cf6. HCJ-D-204-7

Effect:

NE= No Effect
SL= Slight Effect
ME= Moderate Effect
SE= Severe Effect

cf1. Abrasion resistance: The sample is observed after 100 cycling with the load of 1000g.

cf2. Heat & Cold repetition test: The sample of 150mm X150mm is placed in an oven at 60℃ for 2hrs, and then put into the cold bath of -20℃. After 2 cycling, observe the defects of sample.

cf3. Chemical resistance: Each solvent of 1% NaCO3, 5% CH3OOH, 1% HCl, petroleum benzene is dropped on the sample, After 6 hrs. The sample is washed with water and dried.

cf4. Stain resistance (1): Each solvent of coffee and soy sauce is dropped on the sample. After 6 hrs, the sample is washed with water and dried.

cf5. Stain resistance (2): Based on JAS B for the contamination. Draw a line of 10mm wide on the sample. After 4 hrs, wiped it with a solvent or detergent.

cf6. Solvent resistance: The sample is rubbed 10times with cotton wool soaked in petroleum benzene, lacquer, 95% ethanol each. Not Greatly Changed.

cf7. Heat resistance: The sample is placed in an oven 60℃ for 24hrs. After cooling to normal temperature, observe the surface of sample. Not Greatly Changed.

cf8. Whitening by folding: the sample is placed in a thermostat at 25℃ for 30mins, and then fold at an angle of 180 degrees and observe the whitening.

cf9. Water resistance: The sample is dipped in water at normal temperature for 48hrs and dried.