



# Marnot Advanced™ LI Hardcoat HS Clear Polyester

Marnot Advanced LI is a new generation of enhanced hardcoats for demanding graphic arts applications.

Features of Marnot Advanced LI HS Clear Polyester include:

- Uses thermally stabilized base film
- Low iridescence
- Enhanced scratch resistance
- Excellent abrasion resistance
- Outstanding for embossing and die cutting
- Excellent chemical resistance to common household cleaners and industrial solvents
- Second surface printability with solvent and UV inks
- First surface printability with clear, matte and texture UV cure inks

Marnot Advanced LI HS Clear Polyester is available in a web width of 49" and in 5, 7, and 10 mil thicknesses.

## TYPICAL VALUES ‡

Physical	Test Method	Value	Unit
Specific Gravity	ASTM D792	1.3954	g/cm3
Area Factor (Yield Factor)		0.05	Lb/in3
Clarity	TM 10.76	99	%
Haze	TM 10.76	<1	%
Light Transmission	TM 10.76	91	%
Gloss Back Painted Flat Black 60 Degrees	TM 10.15	92	GU
Gloss Clear Over White Matte 60 Degrees	TM 10.15	164	GU
Mechanical	Test Method	Value	Unit
Abrasion Resistance	TM 10.13	5	
Pencil Hardness	TM 10.121	3H	
Tensile Strength MD (break)	ASTM D882A	20000	psi
Tensile Strength TD (break)	ASTM D882A	20000	psi
Yield @ 500 Gauge (nominal)		3968	sq. in./lb.
Yield @ 700 Gauge (nominal)		2834	sq. in./lb.
Yield @ 1000 Gauge (nominal)		1984	sq. in./lb.
Thermal	Test Method	Value	Unit
Glass Transition		70	C
Shrinkage	30 min at 150C		
MD		0.10	%
TD		0.01	%

‡ These are typical values only and should not be confused with specification values. Specifications, tolerances and minimum values are available on request from your Tekra representative.

## As Manufactured Chemical Resistance

Chemical	One Hour Surface Contact at 23C	4 Hours Surface Contact at 23C
Acetone	Pass	Pass
Concentrated HCl	Pass	Pass
MEK	Pass	Pass
Toluene	Pass	Pass
Methylene Chloride	Pass	Pass
Isopropyl Alcohol	Pass	Pass
Cyclohexanone	Pass	Pass
Ethyl Acetate	Pass	Pass
Xylene	Pass	Pass
Brake Fluid	Pass	Pass
Butyl Cellosolve	Pass	Pass
Hexane	Pass	Pass
	24 Hours Surface Contact at 23C	24 Hours Surface Contact at 50C
Coffee	Pass	Pass
Fantastik <sup>1</sup>	Pass	Pass
Formula 409 <sup>2</sup>	Pass	Pass
Windex w/Ammonia D <sup>1</sup>	Pass	Pass
Tide <sup>3</sup>	Pass	Pass
Downy <sup>3</sup>	Pass	Pass
20% Bleach	Pass	Pass
Mustard	Pass	Pass
Mr. Clean <sup>3</sup>	Pass	Pass
Ketchup	Pass	Pass
Tea	Pass	Pass
Tomato Juice	Pass	Pass
Lemon Juice	Pass	Pass
Grape Juice	Pass	Pass
Vinegar	Pass	Pass
Milk	Pass	Pass
Armor All †	Pass	Pass
Ethanol	Pass	Pass
Salt Water	Pass	Pass
Sunscreen	Pass	Pass
Coppertone * SPF 70+		
- Spray	Pass	Pass
- Lotion	Pass	Pass
Deep Woods OFF <sup>1</sup>		
- 25% DEET	Pass	Pass

## Masking and Interleaving

For best performance and yields, we recommend Marnot Advanced LI HS Clear Polyester to be configured with mask on the first surface. Alternative options include the use of interleave as a replacement for the first surface mask.

## Processability

Tekra continually works to enhance the performance characteristics of our products keeping ease and flexibility of processing in mind. Improvements include:

- First surface decoration performance after 10 print and curing cycles
- Excellent chemical resistance without the need for post curing
- Minimize micro cracking for deeper embossing

We continually validate our products with common processing methods including screen printing, laser cutting, die cutting, and embossing. For more information on our testing or to conduct your own tests on samples, please contact your Tekra sales representative.

The application suggestions, specifications and other data described here are based on experience that is believed by Tekra to be reliable. We recommend that before using these products in production, you perform your own tests to determine whether these products are suitable for your particular purposes and operation conditions.

Any order for these products will be subject to Tekra's terms and conditions of sale.

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<sup>1</sup> Registered Trademark of SC Johnson

<sup>2</sup> Registered Trademark of the Clorox Company

<sup>3</sup> Registered Trademark of Proctor and Gamble

† Registered Trademark of ArmorAll Products Corp

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