# Marnot® XL Economy Polyester Clear Hardcoat

Marnot® Economy Clear Hardcoated Polyester offers the aesthetic appearance of a clear gloss/gloss material while still having a high chemical, scratch and abrasion resistance, making this material perfect for appliance overlays, nameplates, or lenses.

Featues of Marnot XL Economy Include:

- Excellent Abrasion and scratch resistaance.
- Outsanding for embossing and die cutting
- Excellend chemical resistance
- Second surface printability with solvent and UV inks

Marnot® XL Clear Economy Hardcoated Polyester is available in 7 mil thickness. Custom roll widths, gauges and sheet sizes are available.

#### **TYPICAL VALUES** ‡

Physical	Test Method	Value	Unit
Specific Gravity	ASTM D792	1.3954	g/cm^3
Area Factor (Yield Factor)		0.05	lb/in^3
Clarity	TM 10.76	>66	%
Haze	TM 10.76	8	%
Light Transmission	TM 10.76	91	%
Gloss Back Painted Flat Black			
60 Degrees	TM 10.15	55	GU
Gloss Clear Over			
White Matte			
60 Degrees	TM 10.15	90	GU
Mechanical	Test Method	Value	Unit
Abrasion Resistance (Delta)		Δ8	
Pencil Hardness (Theoretical)	TM 10.97	2H-3H	
Tensile Strength at:	ASTM D882		
Yield, MD		13000	psi
Yield, TD		13000	psi
Break, MD		24000	psi
Break, TD		27000	psi
Tear Strength at Initiation			g/mil
Tear Strength at Propagation	ASTM D1922	16	g/mil
Thermal	Test Method	Value	Unit
Glass Transition (Tg)		70	°C
Shrinkage			
MD		2.5	%
TD	5 min @190°C	1.0	%

<sup>&</sup>lt;sup>‡</sup> 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.

## **Post UV Curing Chemical Resistance**

Chemical	One Hour	4 Hours
Cileilicai	Surface	Surface
	Contact at	
		Contact at
Acatono	23C	23C Pass
Acetone Concentrated HCl	Pass Pass	Fail
MEK	Pass	Pass
Toluene	Pass	Pass
	Pass	Pass
Methylene Chloride	Pass	Pass
Isopropyl Alcohol	Pass	Pass
Cyclehexanone	Pass	Pass
Ethyl Acetate	Pass	
Xylene Brake Fluid	Pass	Pass Pass
Butyl Cellosolve Hexane	Pass	Pass
пехапе	Pass 24 Hours	Pass
	Surface	24 Hours Surface
	Contact at	Contact at
	23C	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	Slight Stain
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

#### **Masking and Interleaving**

Marnot XXL Economy Clear Polyester can be configured with interleaving, mask on the first or second surface, or with no masking or interleaving. If no protective interleaving or masking is selected, Tekra will not warranty against spot abrasions or other damage to the uncoated surface in transit.

## **Processability**

Tekra has made a good faith effort to validate the suitability of this product with common processing methods including screen printing, laser cutting, die cutting, and embossing. However, because of the variability between different types of equipment, methods and processing conditions, Tekra recommends that you work with your Tekra representative, your ink representative, and your machine manufacturer to determine the substrates, inks, machinery, and settings that work best in your particular situation.

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.

Version 1.1

- <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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