



# MARNOT™ XL HARDCOAT MATTE POLYESTER

Marnot films are a complete line of functional hardcoats designed for graphic arts applications. Features of our hardcoat include:

- Available in 20, 35, 55, 75 and 90 GU matte levels.
- Excellent abrasion and scratch resistance
- Outstanding embossability and diecuttability
- Excellent chemical resistance to common household cleaners and many other substances
- First and second surface printability with solvent and UV inks, including clearing inks

Marnot XL Matte Polyester is available in web widths up to 49" and in 5, 7 and 10 mil thicknesses.

## TYPICAL VALUES ‡

Physical	Test Method	Value					Unit
Specific Gravity	ASTM D792	1.3954					g/c3
Area Factor (Yield Factor)		0.05					Lb/in3
Clarity	ASTM D1746	70	58	50	34	25	%
Haze	ASTM D1003	8	10	16	29	55	%
Light Transmission	ASTM D1003	88					%
Water Absorption, Equilibrium	ASTM D570	1					%
Resistance to Humidity	720 hrs @100F, 100% RH	Pass					
Gloss Backpainted Flat Black	ASTM D523						GU
60 Degrees		55	45	33	20	10	
85 Degrees		-	-	-	-	-	
20 Degrees		-	-	-	-	-	
Gloss Clear over White Matte	ASTM D523						GU
60 Degrees		90	75	55	35	20	
85 Degrees		-	-	-	-	-	
20 Degrees		-	-	-	-	-	
Mechanical	Test Method	Value					Unit
Abrasion Resistance	ASTM D1044	5					
Pencil Hardness	ASTM D3363	H					
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	ASTM D1004	1000					g/mil
Tear Strength at Propagation	ASTM D1922	16					g/mil
Thermal	Test Method	Value					Unit
Glass Transition		70C					
Shrinkage	30 min at 120C						
MD		0.5					%
TD		0.4					%

‡ 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 or from Tekra Corporation.

**CHEMICAL RESISTANCE**

<b>Chemical</b>	<b>One Hour Surface Contact at 23C</b>	<b>24 hours surface contact at 23C</b>
Acetone	Pass	Pass
Concentrated HCl	Pass	Fail
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
	<b>24 hours surface contact at 23C</b>	<b>24 hours surface contact at 50C</b>
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
Top Job <sup>3</sup>	Pass	Pass
Armor All †	Pass	Pass
Ethanol	Pass	Pass
Salt Water	Pass	Pass
Sunscreen	Pass	Pass

**MASKING AND INTERLEAVING**

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

**CUSTOMIZABILITY**

Marnot is normally available in roll form, 49" wide by 2700 feet long on 7 mil PET, 4000 feet long on 5 mil and 3000 feet long on 10 mil. Stock sheets are available in 7 mil and any stock can be custom slit or sheeted for maximum convenience for your applications.

The application suggestions, specifications and other data described here are based on experience that is believed by Tekra Corporation to be reliable. Because of the characteristics of these products, you should, before using these products in production, perform your own tests to determine to your satisfaction whether these products are acceptable and suitable for your particular purposes under your 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.