



ProTek® Hardcoat Weatherable Clear HS Polyester

ProTek films from Tekra incorporate the latest advances in coating technologies to offer the most advanced hardcoats in the industry.

Features of ProTek Weatherable Clear HS Polyester include:

- Uses thermally stabilized base film (HS)
- Excellent outdoor weathering characteristics
- Allows clear, weather resistant windows
- Abrasion and scratch resistance
- High chemical resistance to common household cleaners and industrial solvents

ProTek Weatherable Clear HS Polyester is available in a web width of 49" and in a 7 mil and 10 mil thickness. Custom roll widths and sheet sizes are available.

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	%
UV Spectrum Transmission			
300-370 nm	Light Transmitted	<1	%
285-380 nm	Light Transmitted	<5	%
Xenon Arc Testing	SAE J2527		
1000 hours		0.5	Δ YI
2000 hours		1.1	Δ YI
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	10	
Pencil Hardness	TM 10.97	2H	
Thermal	Test Method	Value	Unit
Glass Transition		70	C
Shrinkage	30 min at 150C		
MD		0.2	%
TD		0.1	%

‡ 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.

Post UV Curing 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 ¹	Pass	Pass
Formula 409 ²	Pass	Pass
Windex w/ Ammonia D ¹	Pass	Pass
Tide ³	Pass	Pass
Downy ³	Pass	Pass
20% Bleach	Pass	Fail
Mustard	Pass	Slight Stain
Mr. Clean ³	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

Masking and Interleaving

ProTek Weatherable Clear HS 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, ink, 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.

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¹ Registered Trademark of SC Johnson
² Registered Trademark of the Clorox Company
³ Registered Trademark of Proctor and Gamble
† Registered Trademark of ArmorAll Products Corp



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