



MARNOT® ADVANCED HARDCOAT CLEAR POLYESTER

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

Features of Marnot Advanced Clear Polyester include:

- 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 texture UV cure inks

Marnot Advanced Clear Polyester is available in web width of 49" and in 7 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 | % |
| | | | |
| | | | |
| 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 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 | | 70 | C |
| 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, LLC.

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 | Pass |
| Mustard | Pass | Pass |
| 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 |
| Coppertone * SPF 70+ | | |
| - Spray | Pass | Pass |
| - Lotion | Pass | Pass |
| Deep Woods OFF ¹ | | |
| - 25% DEET | Pass | Pass |

MASKING AND INTERLEAVING

Marnot Advanced Clear PET 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, LLC. 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.

Version 1.6 - July 2020

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.

* Registered Trademark of Schering Plough



TEKRA, LLC
16700 W LINCOLN AVE
NEW BERLIN, WI 53151
800-448-3572