TEKRA A DIVISION OF EIS, INC.

TEKRANEWS

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JetView™ Latex Backlit Polyester

Tekra is excited to announce a new addition to our JetView™ Latex line of films. We have an 8 mil cosmetic-grade backlit polyester film that will satisfy your need for a brighter white and wider substrate. Offering comparable adhesion and scratch resistance to our JetView Latex Polycarbonate Films, as well as being waterproof, there is no need for post-processing after printing. This film provides high resolution with a crisp, quality image with or without being backlit.

In addition to brighter and wider, our new JetView Latex Backlit Polyester is eco-friendly with a #1 recyclability rating and when combined with the eco-friendly latex inks, it creates a fully-recyclable product that helps propel the printing industry forward in making strides towards reducing its ecological footprint.

This product has also been tested with UV inks successfully and can be recommended for Durst, Epson, and Roland specifically when looking for alternative uses or wider, brighter film for a UV Inkjet press.

This is the perfect complement to our already-successful JetView Latex White Translucent Polycarbonate, as it is cooler in color for POP advertisements vs. the warmer hue of the polycarbonate for more industrial backlit applications. It opens our offering up by adding a new base substrate, and has three width options available; 50", 60" and 87". Our stocked rolls will all be 164' with custom lengths available. (Minimum order and lead times may apply).

Stock will be available soon!

When to Use a Hardcoated Film vs. Uncoated Film

One of the most common questions we are asked when assisting customers with a film selection for their applications is, "Should I use a hardcoated or uncoated film?" To help answer this, there are four main application characteristics to consider that will assist in determining which film choice to make.

ABRASION & SCRATCH RESISTANCE

Uncoated films can be somewhat easily scratched or abraded whereas a hardcoated film has a high degree of resistance. In evaluating your application needs, there are key categories and follow up questions you need to consider in regards to scratch and abrasion resistance. If the answer is "Yes" to any of these questions, you should consider a hardcoated film for your application for best results:

- **Human Interaction** – Will there be human interaction with the finished application? Will it be touched? Will it be wiped clean?

- **Safety Consideration** – Does your application require reverse printed safety instructions/information to be readable for a specific period of time?

- **Aesthetics** – Will your application have reverse printed corporate logos or graphics for brand recognition?

- **Base Film Needs Protecting** – Is a specific base film needed for application attributes, but the environment the finished application is in may not be suitable for the base film? Essentially, does the base film need protecting?

CHEMICAL RESISTANCE

Many applications require a certain amount of chemical resistance based on what the film will be exposed to. Common base films like polyester and polycarbonate can discolor and even break down and fail when exposed to certain chemicals. Most of these "chemicals" we see in our daily lives. If your application will see any exposure to the following "chemical classifications" you should highly consider using a hardcoated film:

- **Industrial Chemicals** – MEK, Acetone, Concentrated HCl and other acids can easily break down and destroy uncoated films.

- **Household Cleaners** – Window, kitchen, and bathroom cleaners can swell, haze, or breakdown uncoated films.

- **Detergents & Bleach** – Detergents & bleaches for washing clothes can stain, swell, or breakdown uncoated films.

- **Food & Drink** – Common foods and drinks such as mustard, ketchup, coffee, milk, and juices can stain or discolor the surface of an uncoated film.

- **Skin Care Products** – Sunscreen, insect repellants with 25% Deet, and other skin care products that can transfer to the surface of a film by touch can stain, haze, or break down an uncoated film.

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EMBOSSING AND/OR FORMING

This third characteristic can be a complicated one to come to a decision on what film to choose. An uncoated film will elongate to a greater degree than a hardcoated film when embossing or forming. Hardcoated films will reach a point where it can start to micro-crack if pushed beyond its elongation point. However, many formed or embossed applications need the scratch and chemical resistance a hardcoat provides. So what do you do if the forming/embossing requirements dictate the use of an uncoated film, but the finished application needs the field benefits of a hardcoated film?

There are things a manufacturer can change to achieve the best of both worlds. If a hardcoat is needed, manufacturers can make sure they do not reach the elongation point where micro-cracking occurs by working the geometry of the part by doing things such as:

- **With forming:**
  - Changing the part layout.
  - Changing how close the pieces are to each other on the master sheet.
  - Change the parameters of the forming process.
- **With embossing:**
  - Change the size of the embossed button.
  - Change the distance the dome of the embossed button has to move down to make the circuit connection.

UV BLOCKING

The fourth and final characteristic to consider is the easiest to determine. Does your finished application need to have UV blocking characteristics? Essentially, will the finished application be outdoors or constantly be hit by the sun's rays? If the answer is "Yes" use a hardcoated film. If the answer is no, than an uncoated film is acceptable.

If at the end of this four step evaluation, you are still unsure which direction you should go with your film choice, Tekra has experienced sales and customers service staff that can assist you. Just give us a call!

Melinex® (S)TCH "Touch" Series

Tekra continues to work closely with DTF to introduce Melinex® (S)TCH Series products into the electronics marketplace.

Melinex® TCH and STCH "Touch" Series is an expanding line of heat stabilized, thin polyester films from DuPont Teijin Films™ (DTF). They combine low bloom (i.e. 'low haze' after heating), unique low iridescence (IR) properties, and/or adhesion to solvent and UV ink systems.

- An index matched primer system gives Melinex® STCH film its low IR properties. This is important in managing refractive index (i.e. 'rainbow') when functional coatings (i.e. Marnot™) are added to the base polyester film.
- "TCHXX" means the film has not been thermally (heat) stabilized
- "STCHXX" means the film has been thermally (heat) stabilized; <0.1% MD and <0.02% TD shrinkage after 150C, 30 minutes
- Typical product gauge range: 50 – 75 micron (200 – 300 ga)

Melinex® (S)TCH series are ideal for optical display applications (i.e. touch sensors, hand held devices, etc.) sold into thin, consumer electronics applications (a.k.a. Flexible Electronics).

The product portfolio continues to broaden from developmental to commercial product offerings:

- STCH11 / STCH12 – refractive index matched one (STCH11) or two sides (STCH12)
- STCH14 – refractive index one side; acrylic primed one side
- STCH21 – one side acrylic primed; untreated opposite side
- TCH Product Offering – any of the above products non stabilized (TCH11 – TCH21)

We are always interested in adding additional voice of the customer feedback. Please contact your sales representative for more product information.

3M™ Controltac™ Print Film 40C: One film. Multiple applications.

3M™ Controltac™ Print Film 40C is a versatile, non-cast film that can be used in a multitude of applications, ranging from wall, window and floor graphics to partial vehicle graphics. You can reduce excess inventory by using one graphic film to replace multiple rolls. This film is designed to provide both repositionability and air release at an affordable price. In addition, it is optimized for printing, providing high quality, consistent color graphics every time.

This 3-mil, removable, vinyl film offers many features, including the ability to be printed with Solvent, Eco-Solvent, UV and Latex inkjet printers. It can also be screen-printed. In addition, 3M™ Controltac™ Print Film 40C comes standard in both gloss and matte finishes. One of the most valued features is that the film includes both 3M™ Controltac™ Technology and

3M™ Comply™ Adhesive, facilitating ease of installation.

3M™ Controltac™ Print Film 40C can be used for a wide variety of applications. Consider using the film for general, intermediate indoor and outdoor signage, indoor and exterior building window and dividers, or for indoor floor graphics. This film is also suitable for partial vehicle graphics, including truck graphics on flat or simple curved areas.

Call Tekra today for more information on 3M™ Controltac™ Print Film 40C.

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