

3M™ Ultra Clear Double Coated Tape UCT-50

Now you see it... Now you don't...

[3M™ Ultra Clear Double Coated Tape UCT-50](#)

is a thin, double coated, ultra-clear tape produced in a clean room environment. 3M™ Ultra Clear Double Coated Tape provides 90% light transmission and only 1.1% haze making it the ideal choice for applications requiring the ultimate in clarity such as:

- [Tablet or cell phone lens attachment](#)
- Screen displays
- [Applications requiring light transmission](#)
- LED component applications
- Backlit displays



The product construction consists of 0.74 mils of non-silicone, acrylic adhesive on both sides of a clear polyester film carrier. The adhesive provides instantaneous adhesion and good tack along with added dimensional stability.

Tekra can provide additional value to this product offering toll converting services in small minimums. Contact us today at 1-800-448-3572 or www.tekra.com for more information.

Light Management Films

Finding the right polymeric film to meet a specific light management need is often a difficult commercial challenge. The wide range of inherent characteristics of plastic films, varying test methods, and terminology differences can add to that material selection challenge. A good starting point is to understand that plastic films can be categorized into the 3 different types of light management products: Light Transmission (high, low, or spectrum specific), Light Diffusing, and Light Reflecting.

Tekra has published a comprehensive Technical Tip on our website, which you can access by [clicking here](#). This Technical Tip provides an overview of common design challenges and commercial applications. Additionally, it includes a listing, with data sheets, of each specific material type available, through Tekra, from our supply partners within the afore-mentioned categories. We will summarize these here. Supply partners include: [DuPont Teijin Films®](#), [3M](#), and [SABIC Innovative Plastics](#).

Light Transmission

As mentioned above, plastic films and laminated products have light transmission ranges from virtually zero to approximately 88%. With the addition of anti-reflective coatings, it is possible to add 1.5%-3% to the total transmission values, possibly more. Anti-reflective materials have application in personal protective equipment and electronic displays. On the opposite extreme, even thin films can be made completely light blocking by laminating metal foils into the structure of the film. Applications for light blocking materials are two sided displays and packaging of photo-sensitive materials. Tekra offers a wide variety of [Melinex® Polyester films](#) and custom anti-reflective coated films for this space.



Light Diffusion

The most common light diffusion application is backlights, including backlit signage. Backlights are typically lit with LED or fluorescent light sources. These light sources can cause hot spots of focused light if the proper film type is not used. These hot spots detract from the visual appeal and readability of the image for the backlit sign. Light diffusing films are engineered to diffuse LED and fluorescent hot spots without sacrificing light transmission to improve display quality and reducing energy consumption within the light source. There are nearly 15 light diffusion films that are available from Tekra including digital films, polycarbonate films, polyester films, and pressure sensitive films. [Click here](#) for the full list of products.

Light Reflection

Light reflection films are designed to do just what the name says: to reflect or redirect light. In many light management applications such as LCD backlight units and light ballasts, light will escape or be absorbed by other materials in the construction which will diminish the brightness of the light source. By adding reflective films to these applications, upwards of 98.5% reflectivity over the full visible spectrum and all incident angles can be achieved depending on the type of light reflection film that is used. [3M and DuPont Teijin Films®](#) offer various light reflection films.

With access to the latest films from top manufacturers augmented with Tekra's coating capabilities, Tekra can help you with all of your light management application challenges. Our technical team will work with you to select the right film for your specific application. Contact Tekra today!

DSCOOP Phoenix 2017 Proves ROI in Digital Platforms

Tekra, A Division of EIS, Inc. had the pleasure of attending the 12th annual DSCOOP conference in Phoenix, AZ earlier this month. As always, it was an informative show full of the latest printing technologies, and break out seminars to further educate their users.

With the addition of Inkjet in the past few years, it is apparent that more and more print shops are crossing over and finding the right markets for each press platform, utilizing both technologies to the fullest and expanding their portfolio. In keeping with that theme, much of DSCOOP seemed to center around profit-building by expansion of market offering and proper management.



MARCH 1-4, 2017 PROUD PARTNER

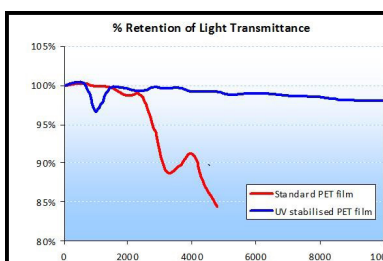
HP Indigo was showing off its new large format presses, which open new markets for the platform, as well as allow greater yields and essentially quicker turn-around times with sheet size maximums approximately 20" x 29.5" – this is a significant size growth over their previous maximum size of 13" x 19". In addition to the wider format, their new presses are equipped with 'One Shot' technology, which saves time and improves registration quality. In turn, this reduces labor costs and improves efficiencies to help bring dollars to the bottom line.

Their speakers this year were impressive, with the headliner being the Oakland A's EVP of Baseball, Billy Beane, followed by several breakout sessions that discussed the supply chain economics and effective sales tactics.

As the digital technologies advance, the more we see the economic return on digital printing, and this showcase certainly didn't deviate from driving that message home.

Melinex® ST™ – A Premier Heat Stabilized Polyester Film

DuPont Teijin Films™ (DTF) has been a leading high quality supplier of polyester (PET) and PEN films for more than fifty-five years. For many of those years the heat stabilized [Melinex® ST™ polyester](#) range has been available. These products have provided enhanced dimensional stability for higher temperature applications and processes.



In 2006, DTF commissioned a state of the art heat stabilizing asset in the USA which can thermally stabilize PET film from 2mil to 14mil (50 – 350 microns), with a max

web width of 76" (1930mm). Proprietary technology is employed to provide best in class dimensional stability, consistency of shrinkage, web flatness and surface quality.

Today, DTF continues to run a wide variety of film types sold into many diverse applications, including: printed electronics, display, photovoltaics, MTS and medical diagnostics.

Scott Gordon, Marketing Manager for the heat stabilized films, says, "Our Melinex® ST™ range is a differentiated PET film option that is required for many new applications, including the high growth Flexible Electronics segment. The improved dimensional stability can be used in higher temp processes, for holding registration in multi-pass printing or in applications where peak temperatures would provide an unacceptable response from our standard films. All of these benefits come with no compromise to the excellent performance of polyester, for example mechanical strength, chemical resistance, and ink adhesion."

To learn more about Melinex® ST™ films, including the latest product developments, visit [Tekra's web page](#).

Highly Conductive Silver Ink Savings

The Merriam-Webster defines the term silver bullet, as "something that acts as an immediate solution to a long standing problem." In printed electronics, the requirement for more current carrying capacity in smaller footprints continues to drive the need for highly conductive materials.

Henkel Electronics has introduced two unique silver (ink) bullet solutions for enabling next generation printed electronics applications.



Loctite® ECI 1010 E&C and ECI 1011 are the newest silver ink compositions available from Tekra, A Division of EIS, Inc. Both products allow for improved design flexibility, increased conductivity, and permit the deposition of thinner lines and thinner print thickness – resulting in material savings.

Optimized for design functionality, ECI 1010 & 1011 can be utilized in a myriad of printed electronics applications, including: flexible circuits, membrane switches, smart card applications, RFID, and other related electronics.

[LOCTITE® ECI 1010 E&C](#)

This screen and rotary screen printable conductive silver ink combines excellent conductivity with optimum mechanical strength and flexibility.

[LOCTITE® ECI 1011 E&C](#)

This highly conductive submicron silver ink is screen and flexo printable.

For additional information, please [click here](#).