Technical Bulletin

Jindal Films

Label-Lyte™ 75PT600
PLATINUM THERMAL™

Platinum Thermal™ 75PT600 is a unique substrate. Consequently, the black image is created by a different film design than that of traditional DT and TTR printing. It is similar to DT in that it can be “marked” with sharp mechanical down pressure, but it also provides many attributes that DT doesn’t. The Platinum Thermal™ surface can be scratched and does abrade if your goal is to intentionally do so. Regardless of what we observe while scratching and working away at the surface layer with our fingernail, Platinum Thermal™ is often approved as fit for use when the label is tested in “real world” applications (e.g. food/meat packaging). Jindal Films does have customers who have added their own protective coatings and flood coat inks. Applying coatings has helped to reduce the marring and to improve durability to some extent.

As with any new material, we suggest that you test the substrate in your application to determine fitness for use. That is where the attributes of Platinum Thermal™ will truly shine.

Marring or Surface Contact

Platinum Thermal™ film will mar similar to DT film materials. This is a function of the imaging technology and is a result of high pinpoint type pressure to the surface. This high pressure collapses the surface layer of the film and can create a mark. The image “print” areas become more durable after heat of fusion during thermal imaging.

Treatment: Conventional UV or WB Printing and Coating

The surface dyne level of the Platinum Thermal™ print surface is untreated, while the backside is treated to 38 dynes. This provides more flexibility for converters and eliminates any blocking or sticking issues that might occur prior to PS laminating or converting.

For surface print, Platinum Thermal™ film will need to be corona treated prior to surface printing or coating.

After treating and/or coating application, the adhesion bond is very high. When completing a tape adhesion test, the film will show adhesion bond to destruct, and the film will tear in the z direction. This is to be expected based on the design of Platinum Thermal™ film.

Hot Melt Adhesives

When laminating with hot melt adhesives, as with any polyolefin material, low molecular weight oils may migrate into the film and cause slight swelling or curling. There are barrier coatings and various adhesives that can improve this issue. We are open to reviewing the applications and providing guidance if needed.

Surface Color

Platinum Thermal™ has a platinum or gray hue versus other DT and TTR materials. This is standard and the result of the film’s design. This has not stopped any field application from moving forward and does not affect print or ANSI scan performance relative to density or readability.

Die Cutting

Paper die cutting tools are not suggested for Platinum Thermal™. Paper die blades result in tearing, rough cuts, poor dispensing, and potential delamination of Platinum Thermal™ film. A die designed for Platinum Thermal™ film is suggested. For the specific Platinum Thermal™ film construction, the best converting practice is to always work with your die supplier for recommendations regarding blade material type, hardness, cutting angles, and bevel. This practice will ensure label size accuracy and result in optimum matrix stripping and label dispensing performance.

Label-Lyte 75PT600 Platinum Thermal is FDA Approved. FDA’s Food Types and Conditions of Use are set forth in 1 C.F.R. § 176.170(c), Tables 1 and 2.

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