

DuPont™ Cyrel® DFUV

Highest Print Quality with UV Inks



Preliminary Technical Data Sheet

<u>DuPont Packaging Graphics</u> continues to be a global technology leader in the development and supply of flexographic printing systems. Our R&D team continues to develop innovative new solutions to help our customers expand their business by taking advantage of new and profitable opportunities in the growing flexographic packaging market. The DuPont Packaging Graphics portfolio of products includes DuPont[™] Cyrel[®] brand photopolymer plates (<u>analogue</u> and <u>digital</u>), Cyrel[®] platemaking equipment, <u>Cyrel[®] round sleeves</u>, <u>Cyrel[®] plate mounting systems</u> and the revolutionary <u>Cyrel[®] FAST thermal system</u>.

DuPont™ Cyrel® Systems: Higher quality at high speed.

Cyrel® FAST DFUV is a thermal process plate for use with UV inks that comes to colour quickly and prints smooth and dense solids, without compromising dot gain, highlights and resolution. DFUV is specifically designed for shorter, narrow web print runs using UV inks on high priced stock, where minimizing the startup waste is essential. Cyrel® DFUV comes up to colour almost immediately and is designed for very fine screens.

DuPont™ Cyrel® DFUV

Applications

High-end substrates including:

- Pressure sensitive labels
- Self-adhesive labels
- Shrink wrap labels
- Wrap around labels
- Tickets/tags/boards

Product Features

- Comes up to colour very quickly and predictably for reduced setup time and reduced material waste
- Extremely rapid access time thanks to thermal plate processing where no drying step is needed
- High and uniform/smooth UV ink transfer for outstanding tonal reproduction
- Very high resolution capability enabling > 200 lpi screens
- Excellent for printed security features and micro text down 1 pt
- High durability on press
- Exceptional thickness uniformity with no plate swelling during platemaking

 High resistance to ozone and white light results in excellent storage capability

Printing Ink and Solvent Compatibility

Cyrel® DFUV is specifically designed for use with UV inks due to its excellent compatibility and resistance. Also offers comparable compatibility with solvent-based, and water-based inks.

Platemaking

The Cyrel® FAST thermal developer allows the production of Cyrel® FAST finished plates in less than one hour, making it the ideal just-in-time platemaking system for a market that demands quick turnaround at the highest possible quality. The Cyrel® FAST thermal developer delivers outstanding plate quality and uniformity. This processor has the ability to produce a finished plate without solvent washout. The Cyrel® ECLF for exposing and light finishing plates is available to complement the Cyrel® FAST thermal developer.





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Process of Use

DuPont[™] Cyrel[®] DFUV is designed to work with Cyrel[®] FAST thermal platemaking. Expose the plate through the back to establish the floor and minimize sensitivity. Back exposure varies according to relief required. Remove the protective coversheet, and image the plate with a Cyrel[®] Digital Imager (CDI). Expose the front of the plate surface. Process the plate in the Cyrel[®] FAST thermal developer. Finish the plate in a light finisher to eliminate surface tackiness. Post-expose the plate to ensure complete polymerization.

Mounting

Cyrel® Microflex mounting devices are recommended for mounting Cyrel® DFUV plates. The double sided adhesive should first be applied to the cylinder or sleeve – not the plate – to ensure easier and precise laydown. The polyester base will maintain accurate register even with large plates.

Storage - Raw Material

Store unexposed plates in a cool area (4–32°C, 40–90°F), away from direct sources of heat. Humidity control is not required. Cyrel® DFUV is foam interleaved to provide maximum protection of the plate after manufacture, and during transportation and storage. Plates should be stacked flat. Plates should not be exposed to direct sunlight or excessive white light. Continuous exposure to very high ozone concentrations should be avoided.

Handling - Raw Material

Like all photopolymer plates, Cyrel® DFUV plates should be handled under UV free light; e.g. fluorescent tubes covered with amber sleeves.

Storage – Finished Plates

After printing, plates should be thoroughly cleaned with a compatible solvent before storing. They may be stored on cylinders, sleeves or demounted and stored flat.

Technical Data		
	Cyrel® DFUV 45 Thickness 1,14 mm / 0,045"	Cyrel® DFUV 67 Thickness 1,70 mm / 0,067"
Durometer	76 Sh A	73 Sh A
Image Reproduction	1-98% / 80 L/cm/200 lpi	1–98% / 80 L/cm/200 lpi
Minimum Positive Line Width	0,100 mm / 4 mil	0,100 mm / 4 mil
Minimum Isolated Dot Size	200 μm	200 μm
Relief Depth	max. 0,55 mm / max. 0,022"	max. 0,65 mm / max. 0,026"

For more information on DuPont™ Cyrel® or other DuPont Packaging Graphics products, please contact your local representative:

www.cyrel.eu

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