DuPont™ Cyrel® Performance Plate

DFP Engineered Surface Digital Plate

DuPont Packaging Graphics 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 (analog and digital), Cyrel® platemaking equipment, Cyrel® round sleeves, Cyrel® plate mounting systems and the revolutionary Cyrel® FAST thermal system.

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

DuPont™ Cyrel® Performance Plate DFP is the high ink transfer, combination plate for the DuPont thermal platemaking process, designed to meet the needs of high quality flexo with finest halftone, linework and solids.

**DuPont™ Cyrel® Performance Plate**

**Applications**
- Flexible packaging
- Tag & Label
- Envelopes
- Carrier bags
- Folding cartons
- Pre-print liner
- Beverage cartons

**Product Features**
- Extremely rapid access time thanks to thermal plate processing without a drying step
- Exceptional ink transfer provides smooth, high density solids while maintaining the highest quality highlights. Results in outstanding contrast and dynamic range
- Rugged and clean printing for long, uninterrupted print runs. Image relief is clean and sharp
- Exceptional thickness uniformity. No plate swelling during platemaking
- Less make ready time on press, comes up to color quickly
- Resistance to ozone and white light results in excellent storage capability

**Printing Ink and Solvent Compatibility**
Cyrel® Performance Plates offer excellent compatibility with solvent-based, water-based inks and UV 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® EC/LF for exposing and light finishing plates is available to complement the Cyrel® FAST thermal developer.
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Process of Use
DuPont® Cyrel® DFP is designed to work with Cyrel® FAST thermal plate processors. Expose the plate through the back to establish the floor and activate the plate. 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 a Cyrel® FAST processor to remove unexposed polymer. Finish the plate in a light finisher to eliminate surface tackiness. Post-expose the plate to ensure complete polymerization.

Mounting
DuPont® Cyrel® Microflex mounting devices are recommended for mounting Cyrel® Performance 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.

Handling – Raw Material
Store unexposed plates in a cool area (40–90°F, 4–32°C), away from direct sources of heat. Humidity control is not required. Cyrel® DFP 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. Like all photopolymer plates, Cyrel® Performance 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

<table>
<thead>
<tr>
<th>Dependant on Processing Conditions</th>
<th>Cyrel® DFP 45 Thickness 1.14 mm / 0.045 inch</th>
<th>Cyrel® DFP 67 Thickness 1.70 mm / 0.067 inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durometer</td>
<td>78–80</td>
<td>70–72</td>
</tr>
<tr>
<td>Image Reproduction</td>
<td>1–98% 150 lpi 60 l/cm</td>
<td>1–98% 150 lpi 60 l/cm</td>
</tr>
<tr>
<td>Minimum Positive Line Width</td>
<td>0.075 mm (3 mil)</td>
<td>0.075 mm (3 mil)</td>
</tr>
<tr>
<td>Minimum Isolated Dot</td>
<td>200 micron (7.2 mil, 0.2 mm)</td>
<td>200 micron (7.9 mil, 0.2 mm)</td>
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<tr>
<td>Relief Depth</td>
<td>0.018–0.022 inch / 0.45–0.55 mm</td>
<td>0.018–0.022 inch / 0.45–0.55 mm</td>
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For more information on DuPont™ Cyrel® or other DuPont Packaging Graphics products, please contact your local representative: www.cyrel.dupont/na

United States
DuPont Packaging Graphics
Chestnut Run Plaza, Bldg. 702
974 Centre Road
Wilmington, DE 19805
800-345-9999

Canada
DuPont Packaging Graphics
1919 Minnesota Court
Mississauga, ON L5N 0C9
Canada
905-816-3238

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