

# DuPont™ Cyrel® FD1

MEDIUM HARD ANALOGUE PLATE FOR THERMAL PLATEMAKING PROCESS

## DuPont Packaging Graphics

**To help our customers gain competitive advantage in the global packaging graphics value chain.**

DuPont Packaging Graphics continues to be a global technology leader in supplying flexographic printing systems. Our scientists continue to develop unique solutions based on new technologies to help our customers expand their business by taking advantage of new profitable packaging printing opportunities. DuPont Packaging Graphics portfolio of products includes Cyrel® brand photopolymer plates (analogue and digital), Cyrel® platemaking equipment, Cyrel® round sleeves, Cyrel® plate mounting systems and the revolutionary Cyrel® FAST thermal system.

**Cyrel® FAST plates in one hour or less! Cyrel® FD1 is the analogue plate for DuPont's thermal platemaking process, designed to meet the needs of quality flexo with halftone, linework and solids.**

### Applications

- Flexible packaging
- Tag & Label
- Carrier bags
- Folding cartons
- Beverage cartons

### Product Features

- Extremely rapid access time thanks to thermal plate processing without drying
- Excellent ink transfer permits superior printing uniformity
- Higher durability for long print runs
- High exposure resolution results in better quality reproduction

DuPont™ Cyrel®



## DuPont™ Cyrel® FD1

- Image relief is clean and sharp
- Exceptional thickness uniformity – no plate swelling during platemaking
- Less make ready time on press
- High resistance to ozone and white light results in excellent storage capability

### Printing ink and solvent compatibility

Cyrel® FD1 offers best compatibility with UV, 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® EC/LF for exposing and light-finishing plates is available to complement the Cyrel® FAST thermal developer.

### Process of use

Cyrel® FD1 is designed to work with Cyrel® FAST thermal platemaking. Expose the plate through the back to establish the floor and maximize sensitivity. Back exposure varies according to relief required. Remove the protective cover-sheet and expose the front of the plate through the negative film to form the image. Negative films should have a high matt surface. Process the plate in the Cyrel® FAST thermal processor. Finish the plate in a light finisher to eliminate surface tackiness. Post-expose the plate to ensure complete polymerisation.



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### Mounting

Cyrel® Microflex mounting devices are recommended for mounting Cyrel® FD1 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), away from direct sources of heat. Humidity control is not required. Cyrel® FD1 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

Cyrel® FD1 plates should be handled under UV free light; e.g. fluorescent tubes covered with amber sleeves.

### Storage – Finished Plates

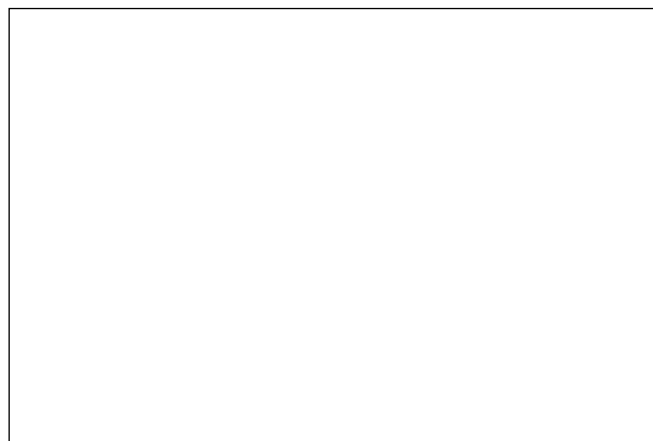
After printing, plates should be thoroughly cleaned with compatible solvent before storing. They may be stored on cylinders, sleeves or demounted and stored flat.

<b>Technical Data</b>				
	<b>Cyrel® FD1 45 Thickness 1.14 mm/ 0.045 inch</b>	<b>Cyrel® FD1 67 Thickness 1.70 mm/ 0.067 inch</b>	<b>Cyrel® FD1 100 Thickness 2.54 mm/ 0.10 inch</b>	<b>Cyrel® FD1 112 Thickness 2.84 mm/ 0.112 inch</b>
<b>Durometer</b>	75 Sh A	67 Sh A	63 Sh A	60 Sh A
<b>Image Reproduction</b>	2 – 95% 42 L/cm	2 – 95% 42 L/cm	2 – 95% 42 L/cm	2 – 95% 42 L/cm
<b>Minimum positive line width</b>	0.2 mm/ 8 mil	0.2 mm/ 8 mil	0.2 mm/ 8 mil	0.25 mm/ 10 mil
<b>Minimum isolated dot size</b>	250 µm	250 µm	300 µm	300 µm
<b>Relief Depth</b>	0.55 mm / 0.022 inch	0.65 mm / 0.026 inch	0.80 mm/ 0.031 inch	0.80 mm/ 0.031 inch

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To learn more, visit [www.packaging-graphics.dupont.com](http://www.packaging-graphics.dupont.com)  
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**“Advancing Flexography”**