

# DuPont™ Cyrel® DFR

High Durometer Digital Plate

## Applications

- Flexible packaging
- Tag and Label
- Envelopes
- Carrier bags
- Folding cartons
- Pre-print liner
- Beverage cartons

**DuPont™ Cyrel® DFR is the high durometer plate for the DuPont thermal platemaking process, designed to meet the needs of high quality flexo with finest halftone, linework and solids.**



## Product Features

- Extremely rapid access time thanks to thermal plate processing without a drying step
- High ink transfer for outstanding tonal reproduction
- Image relief is clean and sharp for all plates
- High durability and clean printing for long, uninterrupted press runs
- Exceptional thickness uniformity. No plate swelling during platemaking
- Less make ready time on press, comes up to colour quickly
- High resistance to ozone and white light results in excellent storage capability

## Printing Ink and Solvent Compatibility

Cyrel® DFR offers 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.

## Process of Use

DuPont™ Cyrel® DFR is designed to work with Cyrel® FAST thermal platemaking. Expose the plate through the back to establish the floor and minimise sensitivity. Back exposure varies according to relief required. Remove the protective coversheet, and image the plate with the 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 polymerisation.

## Mounting

Microdot mounting devices are recommended for mounting Cyrel® DFR 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® DFR 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.

# DuPont™ Cyrel® DFR

High Durometer Digital Plate

## Handling—Raw Material

Like all photopolymer plates, Cyrel® DFR 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.

| Sizes Available | Thickness           | Durometer  | Image Reproduction           | Minimum Positive Line Width | Minimum Isolated Dot Size | Max. Relief Depth   |
|-----------------|---------------------|------------|------------------------------|-----------------------------|---------------------------|---------------------|
| Cyrel® DFR 45   | 1.14 mm<br>(0.045") | 78–80 Sh A | 1–98% @ 60 L/cm<br>(150 lpi) | 0.100 mm<br>(4 mil)         | 300 µm                    | 0.50 mm<br>(0.020") |
| Cyrel® DFR 67   | 1.70 mm<br>(0.067") | 70–72 Sh A | 1–98% @ 60 L/cm<br>(150 lpi) | 0.100 mm<br>(4 mil)         | 300 µm                    | 0.55 mm<br>(0.022") |
| Cyrel® DFR 107  | 2.72 mm<br>(0.107") | 64–66 Sh A | 1–98% @ 60 L/cm<br>(150 lpi) | 0.100 mm<br>(4 mil)         | 300 µm                    | 0.55 mm<br>(0.022") |

DuPont Advanced Printing brings together leading technologies and products for the printing and package printing industries. DuPont™ Cyrel® is one of the world's leading flexographic platemaking systems in digital and conventional formats, including DuPont™ 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.com/ap](http://cyrel.com/ap)

For more information on DuPont™ Cyrel® or other DuPont products, please visit our website.

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. It may be subject to revision as new knowledge and experience becomes available. This information is not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. Since we cannot anticipate all variations in end-use and disposal conditions, DuPont makes no warranties and assumes no liability in connection with any use of this information. It is intended for use by persons having technical skill, at their own discretion and risk. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.

DuPont™, the DuPont Oval Logo, and all products, unless otherwise noted, denoted with ™, ® or ® are trademarks, service marks or registered trademarks of affiliates of DuPont de Nemours, Inc. Copyright © 2019 DuPont de Nemours Inc. All rights reserved.

PDS-AP0031-EN (05/19)/PDS-AP0031-EN (05/19)