

DuPont™ Cyrel® FDT

Universal Medium Durometer Analog Plate for Thermal Platemaking Process



DuPont™ Cyrel® FDT

[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.

Cyrel® FAST plates in one hour or less! Cyrel® FDT is a universal analog medium durometer printing plate. It provides a balance between high quality halftones and solid ink coverage at the same time. Cyrel® FDT is a very robust flexo plate which performs extremely well under demanding conditions.

DuPont™ Cyrel® FDT

Applications

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

Product Features

- Rapid access time thanks to thermal plate processing without drying
- High ink transfer permits superior printing uniformity
- High durability for long print runs
- High exposure resolution results in better quality reproduction
- 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® FDT 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® ECLF for exposing and light finishing plates is available to complement the Cyrel® FAST thermal developer.

Process of Use

DuPont™ Cyrel® FDT is designed to work with Cyrel® FAST thermal platemaking. Expose the plate through the back to establish the floor and maximize sensitivity. Back exposure



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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® FDT 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® FDT 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® FDT 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® FDT 45 Thickness 1.14 mm / 0.045" | Cyrel® FDT 67 Thickness 1.70 mm / 0.067" | Cyrel® FDT 100 Thickness 2.54 mm / 0.100" | Cyrel® FDT 112 Thickness 2.84 mm / 0.112" |
| Durometer | 76 Sh A | 68 Sh A | 55 Sh A | 54 Sh A |
| Image Reproduction | 2–95% / 54 L/cm | 2–95% / 54 L/cm | 2–95% / 48 L/cm | 2–95% / 48 L/cm |
| Minimum Positive Line Width | 0.15 mm / 6 mil | 0.15 mm / 6 mil | 0.20 mm / 8 mil | 0.20 mm / 8 mil |
| Minimum Isolated Dot Size | 250 µm | 250 µm | 300 µm | 300 µm |
| Max. Relief Depth | 0.55 mm / 22 mil | 0.65 mm / 25 mil | 0.75 mm / 29 mil | 0.85 mm / 33 mil |

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

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