

DuPont™ Cyrel® DFS

MEDIUM HARD CYREL® FAST DIGITAL PLATE FOR
EXCELLENT INK TRANSFER

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® DFS is the medium hard Cyrel® FAST digital plate for excellent ink transfer in combination with a much lower dot gain compared to other medium durometer plates.

Applications

- Flexible packaging
- Paper
- Tag & Label
- Folding cartons
- Beverage cartons

Product Features

- Excellent ink transfer permits superior printing uniformity especially on poor substrates
- High exposure resolution results in better quality reproduction
- Image relief is clean and sharp



DuPont™ Cyrel® DFS

- Exceptional exposure latitude allows single exposure without masking
- Excellent thickness uniformity
- Less make ready time on press
- High resistance to ozone and white light results in excellent storage capability

Printing ink and solvent compatibility

Cyrel® DFS offers excellent compatibility with solvent-based inks, water-based inks and also with many 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

Cyrel® DFS 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 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



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developer. Finish the plate in a light finisher to eliminate surface tackiness. Post-expose the plate to ensure complete polymerisation.

Mounting

Cyrel® Microflex mounting devices are recommended for mounting Cyrel® DFS 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® DFS 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® DFS 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.

Technical Data				
	Cyrel® DFS 45 Thickness 1.14 mm/ 0.045 inch	Cyrel® DFS 67 Thickness 1.70 mm/ 0.067 inch	Cyrel® DFS 100 Thickness 2.54 mm/ 0.10 inch	Cyrel® DFS 112 Thickness 2.84 mm/ 0.112 inch
Durometer	73 Sh A	62 Sh A	49 Sh A	47 Sh A
Image Reproduction	1 – 98% 60 L/cm	1 – 98% 60 L/cm	1 – 98% 54 L/cm	1 – 98% 54 L/cm
Minimum positive line width	0.050 mm/ 2 mil	0.050 mm/ 2 mil	0.075 mm/ 3 mil	0.075 mm/ 3 mil
Minimum isolated dot size	200 µm	200 µm	250 µm	250 µm
Relief Depth	0.55 mm/ 0.022 inch	0.70 mm/ 0.028 inch	0.70 – 0.80 mm/ 0.028 – 0.031 inch	0.80 – 0.90 mm/ 0.031 – 0.035 inch

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To learn more, visit www.packaging-graphics.dupont.com or contact your Cyrel® specialist



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