

Roland White ECO-SOL MAX Ink Product Information Guide

Overview

Roland is pleased to announce White ECO-SOL MAX ink, the company's most advanced eco-solvent white ink to date.

Formulated specifically for use with Roland's high-performance 54" SOLJET PRO III XC-540 inkjet printer/cutter, White ECO-SOL MAX is new and improved over original Roland white ink, introduced in 2005 as the industry's first white eco-solvent ink.

New White ECO-SOL MAX ink offers even higher levels of brightness and opacity and delivers superior imaging across a variety of transparent media for text and graphics that reflect crisp, defined edges and smooth gradations. Enhanced scratch and chemical resistance adds durability to finished prints and ensures performance with a wide range of media options.

On a variety of transparent media, White ECO-SOL MAX ink prints flawless highlights, graphics and text, and can be printed as an undercoat to increase the opacity and vividness of four-color printing. White ECO-SOL MAX ink has been tested, profiled and certified for outstanding performance on both coated and uncoated media options including Roland's SCM-SPVCT Clear Adhesive Vinyl, ESM-CSF Clear Solvent Film and ESM-CCVP Clear Calendered Vinyl with Permanent Adhesive.

White ECO-SOL MAX brings the all performance of Roland's most popular ink to the specialized application of white printing. With White ECO-SOL MAX ink, professionals can easily incorporate white design elements into a variety of graphics for truly unique packaging comps, window signs, labels and decals. For many users, these applications can generate significant revenues and open up lucrative new markets while differentiating their capabilities from the competition.



Key Features

New Advanced White ECO-SOL MAX Ink

- **Designed for the XC-540**
- **Outstanding Print Quality**
- **Superior Opacity, Density**
- **Enhanced Durability**
- **Five White Ink Printing Options**
- **Uncoated Media Compatibility**
- **VersaWorks RIP Support**
- **Profitable White Ink Applications**
- **Automated Maintenance System**

New Advanced White ECO-SOL MAX Ink

- **Designed for the XC-540**

Model Number: ESL-3WH

Specifications: 220ml cartridge

Compatible devices: XC-540 and SC-545EXW only

US Price: \$99.99



New White ECO-SOL MAX Ink

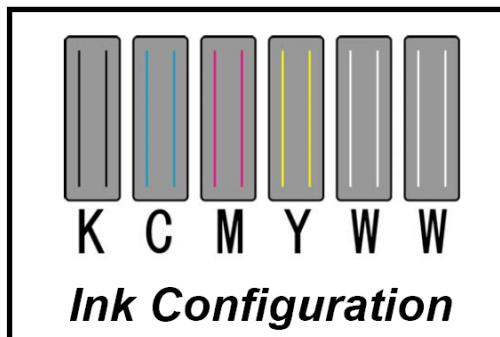
The new White ECO-SOL MAX ink offers not only greater imaging performance but also a 20% cost savings compared to the original ECO-SOL White Ink. Priced at \$99.99 per 220ml cartridge, the cost per ml is \$.45. The average ink cost for a full 200% saturation white flood comes to about \$1.26 per square foot. Since the new ink offers greater density and opacity than the previous generation, less ink can be used depending on the overall white density needed.

Advanced ECO-SOL MAX Ink technology

ECO-SOL MAX eco-solvent ink delivers high color density and a wide gamut for exceptional images print after print. ECO-SOL MAX performs on a wide range of coated and uncoated media, including clear films for increased versatility. Fast-drying and scratch-resistant, ECO-SOL MAX produces prints that dry quickly for easy handling throughout the production and finishing processes. Packaged in no-mess 220ml cartridges, ECO-SOL MAX is virtually odorless for maximum convenience and comfort.

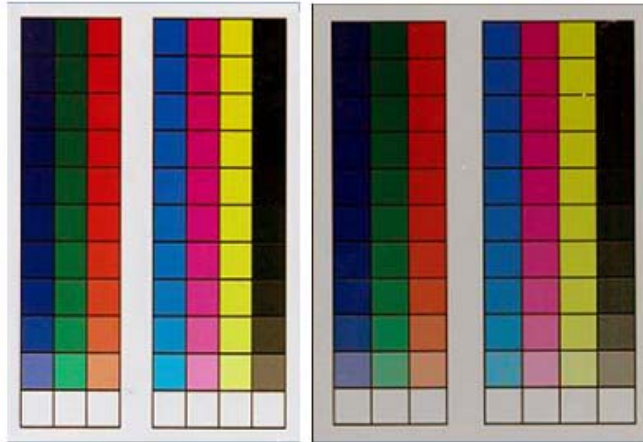
Outstanding Print Quality

The XC-540 is the ideal platform for printing with white ink. The six head configuration enables two print heads to be dedicated to white ink thereby yielding higher density white fills. The XC-540 produces 720x1440 high resolution prints in White ink modes at approximately 38.8 sq. ft./hr. White ECO-SOL MAX produces smooth gradations along with sharp text and graphics that look great both up close and at a distance.



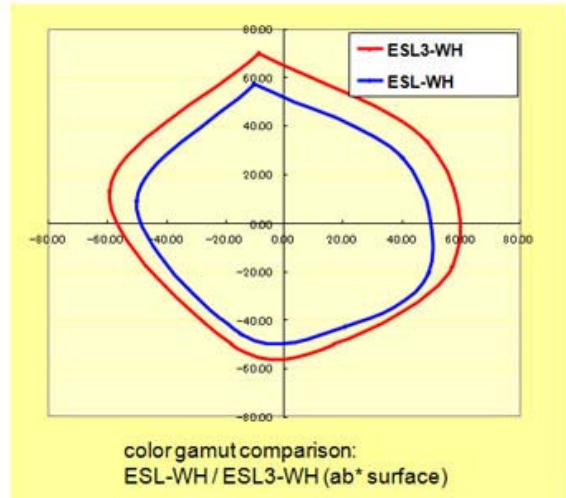
Superior Opacity and Density

White ECO-SOL MAX ink yields a higher opacity and greater density levels than the previous generation white ink. As a result of these improvements, it's now possible to print high quality white gradations and achieve a higher color gamut when using the white ink as an undercoat for CMYK. Even on clear media, prints will display brighter whites and more intense colors than ever before.



New: ESL3-WH

Previous: ESL-WH



ECO-SOL MAX CMYK colors printed over 200% solid white.

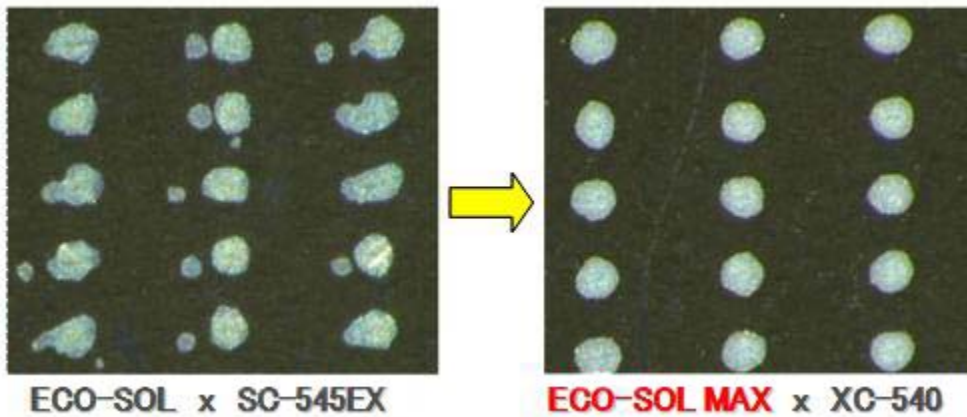
The increased density of White ECO-SOL MAX ink provides better coverage for designs with large white areas and ensures smooth gradations and sharper text and graphics on clear media.



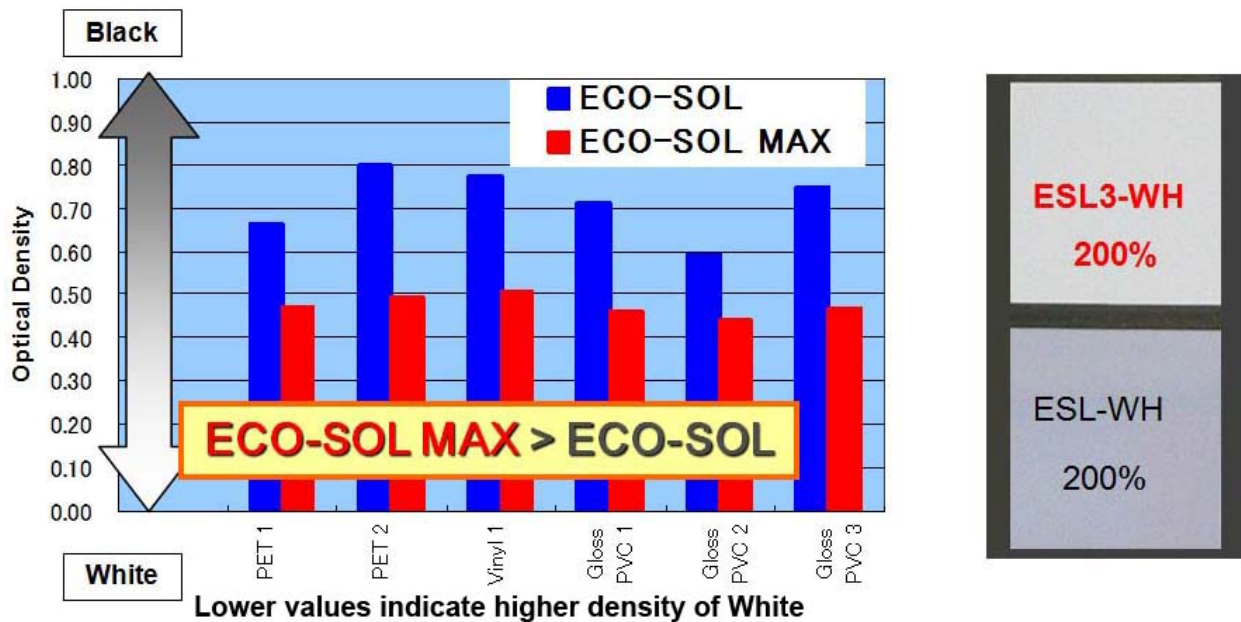
ECO-SOL x SC-545EX



ECO-SOL MAX x XC-540

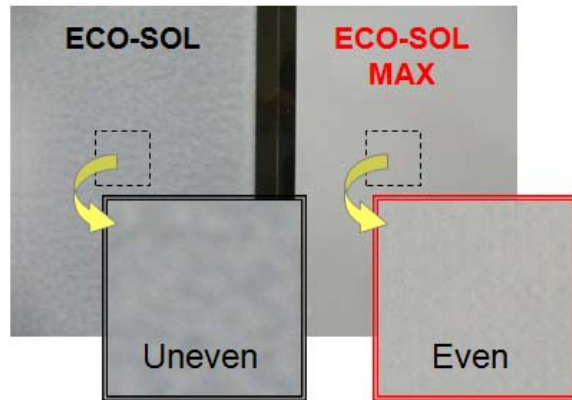


Roland's new white ink formulation enables better dot shape control which helps eliminate the appearance of small scattered satellite droplets. Sharper text and graphics can now be produced on a wider range of coated and uncoated media.



Uncoated media compatibility

White ink printing requires the ability to print on a range of coated and uncoated surfaces. Roland has tested a broad range of clear media. After extensive testing, White ECO-SOL MAX ink samples with 200% solid white areas show significantly greater white density than ECO-SOL white. The ability to achieve these densities on uncoated media enables lower running costs in a production environment.



200% White on uncoated media

White ECO-SOL MAX demonstrates superior smoothness and even surface appearance on a wide range of uncoated and coated clear media after drying. Recommended drying time is 15 minutes to ensure complete dryness and full image saturation when overprinting in CMYK. For the XC-540, the additional DU-540 dryer/blower unit is recommended depending on the media.

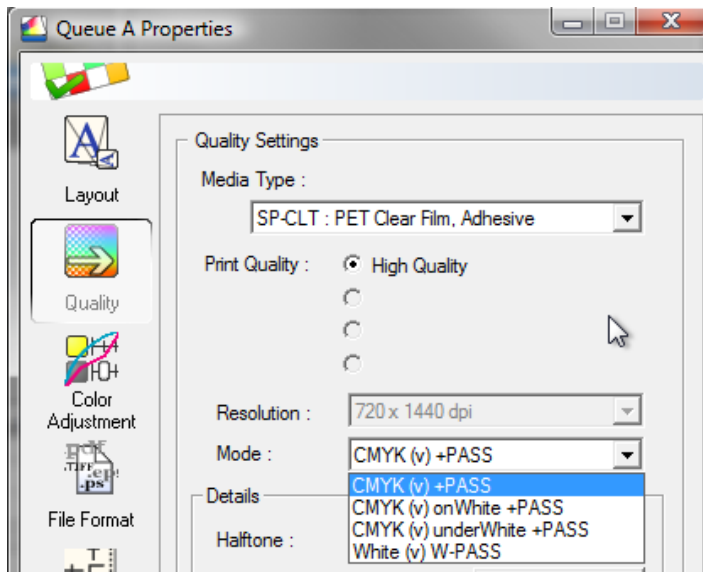
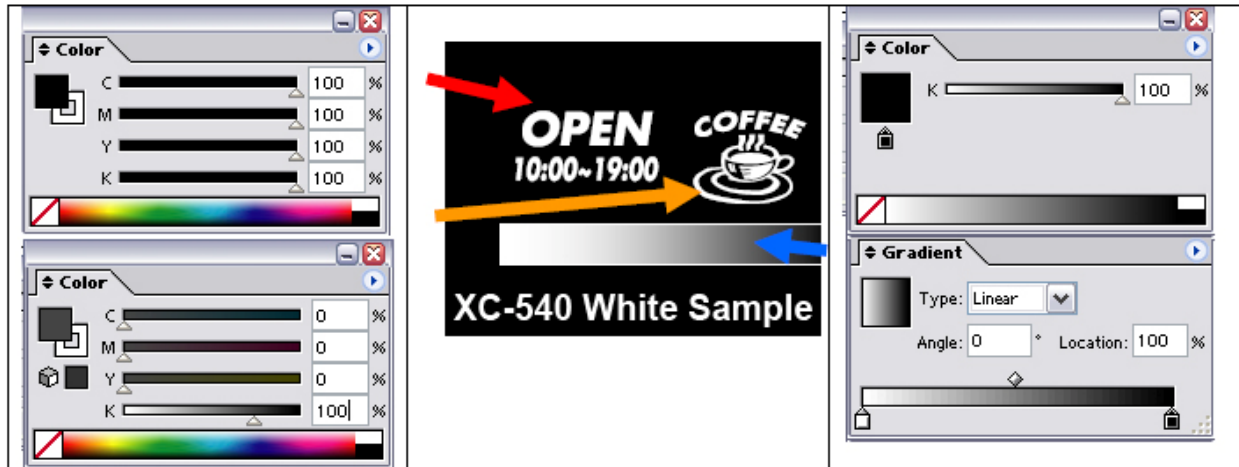
Enhanced Durability

White ECO-SOL MAX also offers increased durability in two key areas: scratch resistance and chemical resistance. These improvements enable easier handling of the finished prints during installation as well as protection from cleaning chemicals such as alcohol that may be encountered in indoor applications. For increased protection when using white ink, Roland recommends lamination using a high quality pressure sensitive overlamine cast film. Lamination will ensure up to 1 year outdoor durability for the finished product.

VersaWorks RIP Software

White ECO-SOL MAX Ink and the 2008 XC-540 were developed in tandem with VersaWorks™ 2.6. This newest version RIP was written by Roland software engineers to ensure exceptional production output with unmatched ease of use. VersaWorks is built upon the genuine Adobe® PostScript® CPSI 3016™ engine. It supports true Adobe® PostScript® 3 and can be used on Windows Vista, XP and 2000 operating systems.

VersaWorks recognizes the unique properties of files created for white ink and optimizes those files for output to the XC-540. In addition, VersaWorks advanced profiles help ensure quality output when using the high density required for white ink applications.



Five White Ink Printing Options

VersaWorks features five printing options that also support combinations of White and CMYK inks:

- White Print
- CMYK Print
- White Print + CMYK Print
- CMYK Print + White Print
- CMYK Print + White Print + CMYK Print

When printing on clear media and outputting CMYK+White+CMYK, text and graphics will be vibrant when viewed from both sides and held up to a light source. Viewing the image from the back (non-printed side) will show any text and image as reversed, so caution must be used in designing a layout.

Applications

Profitable White Ink Applications

White ECO-SOL MAX ink can be used for a wide variety of markets and applications. It's ideal for package comps, window films, labels, signs, decals and point of purchase displays on clear, transparent media as well as opaque substrates. White ink creates the opportunity for profitable new printing solutions that enable graphic professionals to differentiate their services from the competition.

Target markets

Sign Shops

- Window graphics (indoor and outdoor)
- Lamination on glass



Service Bureaus & Commercial Printers

- Point of purchase displays and posters



Label Printers

- Short & medium run labels



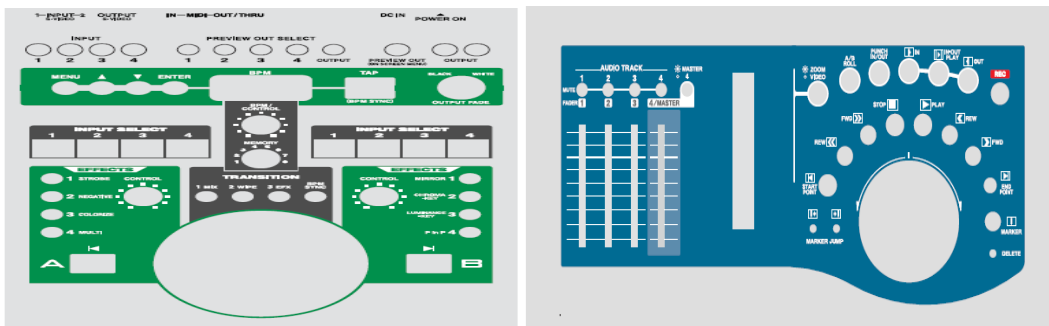
Packaging Printers

- Package design prototypes and comps



Screen Printers

- Control panel prototypes



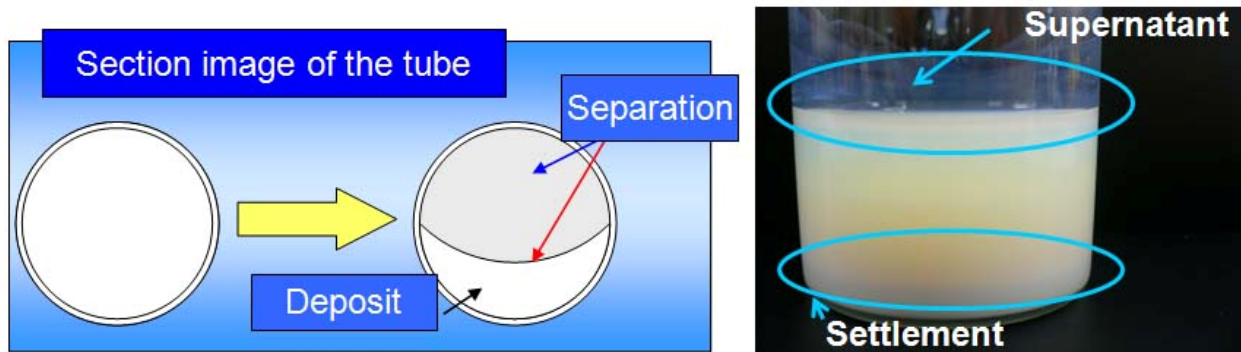
White Ink Maintenance Requirements

Due to the unique characteristics of white ink, additional care is required when installing and maintaining an XC-540 with white ink capabilities. White ink has a tendency to settle in the cartridge, making it necessary to agitate the cartridge before installing it in the printer and again before each use. It is necessary to perform routine ink system maintenance to ensure ink lines remain free of sediment.

The XC-540 includes two firmware-controlled maintenance reminders to ensure proper operation. If the printer has been idle for 12 hours or more, it will prompt for maintenance by displaying **[Ink Refreshing Normal]** on the control panel. If the printer has been idle for one week, it will display the maintenance prompt **[Ink Refreshing Full]**.

Roland recommends following these prompts and allowing the cleaning process to take place. A normal cleaning cycle will utilize roughly 22.2ml of ink per white cartridge. A full cleaning cycle requires the use of a cleaning cartridge and will use approximately 41.3ml of white ink per cartridge.

In addition, the prompt for **[Ink Refreshing_Full]** will be displayed after 2 weeks regardless of printer usage. Although Roland recommends adhering to all maintenance prompts, it is possible to cancel a maintenance cycle by pressing the printer's MENU key.



Roland recommends an ideal operating environment between 20° C to 32° C (68° F to 90° F) to maintain consistent white ink print quality. Lower temperatures can cause white ink misting that reduces image sharpness. The optional DU-540 dryer unit is recommended with the XC-540 printer/cutter configured with white ink to ensure proper ink drying and optimum results on a wide range of media.

Once an XC-540 or SC-545EX is configured for white ink it cannot be reconfigured as a six color printer.

Summary

The new White ECO-SOL MAX ink represents a major breakthrough in solvent printing. By improving density, opacity and brightness along with uncoated media compatibility, the capabilities of white ink printing has ascended to a new standard.

This innovative solution built around the XC-540 and VersaWorks addresses current customer needs for better performance and running costs and creates new opportunities for professionals seeking innovative printing applications.

Introduce your customers to Pure Print Performance in white ink printing from Roland today.