

# TECHNICAL DATA SHEET

## Product Features & Substrates

### Features

DNSC's x-nano™ Black Ultima4000 ink is a newly formulated, rich black water-based ink offering unprecedented coverage. It allows sharp edge accuity and print quality ideal for high-end printing and production standards. It is fast drying (unassisted), produces a dark, crisp image with excellent smear, fade and water resistance.

Ink vehicle:	Aqueous
Ink type:	Dye
Color:	Black
Optical Density:	K 1.2-1.4*
Viscosity:	2.0-6.5cPs*
Surface Tension:	25-40 dynes/cm*
pH	7.0-9.0*
Lightfastness:	Excellent
Waterfastness:	Good
Smudge proof:	Yes
Shelf life:	> 24 months

### Ideal Product Use Conditions\*

All x-nano™ inks and ink parameters are specifically adjusted to meet the requirements of print-head types and manufacturers. DNSC continues to qualify and optimize output for specific applications.

Media compatibility: porous, non-porous, coated, glossy and offset.

### Ink Handling

Proper use and handling will provide optimum print quality and print life. It is recommended that all personnel handling the ink wear gloves and eye protection. Clean up any ink spill immediately. Should ink come in contact with skin, wipe ink off the area with a clean, dry cloth rag and wash affected area with soap and water.

### Storage/Shelf Life

Optimal temperature range for storage is 41°F - 95°F (5°C - 35°C). Keep out of reach of children. This product has a shelf life of 24 months from the date of manufacture when stored under preferred conditions. Exposing the ink to temperatures higher or lower than preferred may have an adverse effect on performance and/or shelf life. The ink needs to acclimatize to room temperature before calibration and printing.



# U

## U-SERIES:

### x-nano™ Black Ultima4000

#### Ultima Inkjet Ink

DNSC's x-nano™ Black Ultima4000 is a multi-performance, water-based black ink with incredible optical density that is fade-resistant, streak-free and fast drying. This ink prints well on a variety of substrates, including glossy and matte stock.

#### Order U-Series Inks

[Request quote](#)

\* Results may vary according to your print conditions. To the best of our knowledge this data sheet is accurate, however; DNSC assumes no liability for the accuracy of this information. The final determination of the suitability for a particular use is the sole responsibility of the user.



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## Ink Performance

DNSC's x-nano™ Black Ultima4000 was developed with tight specifications to significantly increase overall print life, while producing high-quality images. DNSC's Ultima inks have great decap properties in the print head, and also provide fast-dry printing with increased speeds for enhanced productivity. This specially formulated ink offers high optical density and sharp prints that resist smudging.

## Applications

- Fast drying and permanent printing on standard, matte finish paper, semi-gloss, or glossy coated papers, labels and packaging.
- High-definition coding such as datamatrix codes, graphics and text on a variety of surfaces, including coated and uncoated stock.
- High-speed production environments, such as: mailing, labeling and packaging applications.
- Safe to use and environmentally friendlier than UV curable or solvent-based inks.

## Ink Volume

Custom packaging available upon request.

## Operating Conditions

Temperature: 66 ° F – 80 ° F [19 ° C – 27 ° C]  
Humidity - Optimum: 40% - 60% (non-condensing)  
Operational: 30% - 70% (non-condensing)

## DNSC's Warranty

DNSC guarantees the quality of ink it fills into qualified ink containers (INKVERSE™, TIJ 2.5 Cartridges, Other DNSC certified containers). However, it cannot guarantee the printed results since DNSC has no control over customers' operating and printing procedures. While all information on use of this product is provided in good faith, the customer bears sole responsibility in its end use.

Liabilities associated with using this product are limited to the purchase value of the product.

## Validated Equipment for digital inkjet technology

Amica Systems, Brother, Canon, Domino, Epson, Fuji-Dimatix, Hewlett Packard, Impika, Infoprint, Kodak, Konica-Minolta, Kyocera, Lexmark, Pitney Bowes, RR Donnelley, Screen, Panasonic, Ricoh, Xerox and many more.

Do you have questions about this product? [Ask question](#)

## Other x-nano™ U-Series Inks

HP45 Black Ultima4000

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