

# TECHNICAL DATA SHEET

## I-SERIES - UV

### Product Features & Substrates

#### Features

DNSC's x-nano™ Invisible UV Fluorescent inks are ideal for “stealth” tracking (1-D and 2-D barcodes), invisible marking, security applications, anti-counterfeiting, product security and brand protection, art and design. DNSC x-nano™ UV Blue 460 ink turns a visible vivid blue color when exposed to ultra-violet (UV) light of wavelength 365nm (“blacklight”). UV Blue 460 does not interfere with other content when using in combination with visible ink or paint, but enables authentication of objects and items detected by UV light. UV Blue 460 offers a high intensity, high quality ink technology.

Ink vehicle:	Aqueous
Ink type:	Dye
Detection (absorption, wavelength ( $\lambda$ )):	UV light, 365nm
Color (emission, wavelength ( $\lambda_{max}$ )):	Blue, 460nm
Lightfastness:	4+
Waterfastness:	Good
Smudge proof:	Yes
Shelf life:	< 2 years

#### Ideal Product Use Conditions\*

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 < 2 years 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.

### x-nano™ UV Blue 460

#### PREMIUM Invisible Inkjet Ink

DNSC's x-nano™ Invisible UV Fluorescent ink is specifically designed to support many security and non-security applications. Invisible UV Fluorescent Blue 460 ink is completely invisible in normal lighting, but illuminates brightly under UV blacklight (365nm). This ink can be printed, air brushed, or hand-drawn on a variety of media without interfering with other content. I-Series inks provide a platform for endless personal, artistic, industrial and security applications. Use this ink to secretly mark valuables, write hidden messages, keeping all your secret codes hidden from others, or just have fun. The special blend of Invisible UV Fluorescent ink has long lasting special effects.

#### Order Invisible UV Fluorescent ink products

[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.

## Ink Performance

DNESC's x-nano™ Invisible UV Fluorescent ink ensures consistent results for a wide variety of printing needs. This specially formulated ink gives you crisp, sharp prints that resist smudging and is only visible under UV light. x-nano™ Invisible UV Fluorescent Blue 460 prevents receipt and document fraud and can be used as protection from counterfeiting, diversion and illegal duplication. In addition, this ink can be used with other x-nano™ I-Series inks for entertainment purposes to reveal a rainbow of color under UV illumination.

## Applications

Secret communication and information delivery, high speed tracking and authentication using 1- and 2- dimensional invisible fluorescent barcodes, invisible fluorescent watermarks on letter head, envelopes, business cards and checks, invisible content on passports, ID and currency, invisible fluorescent tattoos, fluorescent content on textiles which glows in the dark, invisible signatures on paintings and certificates and much more.

## 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)

## DNESC's Warranty

DNESC guarantees the quality of ink it fills into qualified ink containers (INKVERSE™, TIJ 2.5 Cartridges, Other DNESC certified containers). However, it cannot guarantee the printed results since DNESC 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 by:

Oce, Canon, HP, Ricoh, Kodak, Panasonic, Kyocera, Konika-Minolta, Fuji-Dimatix, Impika, Xerox, Domino, Epson, KBA, RRD, MCS, HP SPS TIJ 2.5/4.0 and many more.

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

## Similar Products

x-nano™ UV Green 545

x-nano™ UV Yellow-Green 560

x-nano™ UV Red 615

## Other Products (Invisible Inks)

x-nano™ IR-783

x-nano™ IR-820

x-nano™ IR-1040

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