

TECHNICAL DATA SHEET

x-nano™ TripWire™ 615G

Multi-level, Color Changing Security Inkjet Ink

Product Features & Substrates

TripWire™ is a revolutionary new family of inks from DNSC that provide a variety of security and tracking features to eliminate fraud and counterfeiting.

By combining groundbreaking nanotechnology and biometric sciences, TripWire™ inks achieve revolutionary fraud & tamper detection, global tracking, security tagging, authentication, counterfeiting & fraud elimination, product security and brand protection. The inks are customizable and uniquely differentiated using DNA biomarkers, color changing, fugitive and energy-shifting properties.

About TripWire™ 615G

x-nano™ TripWire™ G15 ink is “fugitive” when exposed to chemicals commonly used for fraud/alteration and changes color from light grey to vivid red color under ultraviolet (UV) light. TripWire™ 615G’s fugitive properties enable quick and accurate tamper detection and authentication of items under UV light. Each user’s ink can be uniquely differentiated with INKcrypt® DNA biomarkers to provide real-time forensic authentication.

Data Summary

Ink vehicle:	Aqueous
Ink type:	Dye Pigment Hybrid
Color:	Color Changing
Appearance under daylight:	Light Grey
Color change under UV:	Grey to Red
Absorption, wavelength (λ):	365nm
Emission, wavelength (λ_{max}):	Red, 615nm
Lightfastness:	4+
Level 3 security feature:	Customer specific INKcrypt® DNA biomarker (optional)
Waterfastness:	Good
Smudge proof:	Yes
Fugitive properties:	Visible Grey and fluorescent Red color disappear with contact of popular solvents, which instantly alerts of tampering and possible document alteration.
Shelf life:	< 2 years

Ideal Product Use Conditions*

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



x-nano™ TripWire™ 615G

DNA Differentiated Fugitive Color Changing Inkjet Ink

The x-nano™ TripWire™ 615G is specifically designed to support high-security applications. TripWire™ 615G appears grey under visible light and illuminates bright red under UV blacklight (365nm).

Other colors and special effect properties are available within the x-nano™ TripWire™ family of inks. The color change effect supports a broad range of applications. The ink is multi-fugitive and will indicate tampering and alteration with great sensitivity. TripWire™ 615G inkjet ink can be printed or otherwise applied on a variety of media without interfering with other content.

Note: TripWire™ 615R high-security ink availability is restricted to authorized users.

*Performance may vary according to print conditions. We assume no liability for the accuracy of information provided. Suitability for a particular use is the sole responsibility of the user.

Protected By



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Ink Performance

x-nano™ TripWire™ 615G 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 color changing from visible grey to red under UV light. TripWire™ 615G reveals tampering, alteration and fraud of documents and checks. It protects from counterfeiting, diversion and illegal duplication. TripWire™ 615G can be used with other x-nano™ I-Series inks for special effect purposes associated with switching light from visible to UV.

Applications

Fraud alert, information display, high-speed tracking and authentication, multi-fugitive fluorescent watermarks on letterhead, envelopes, business cards and checks, content on passports, IDs and currency, fluorescent content on textiles, signatures, certificates and much more.

Ink Delivery

1, 2, 5, 10, 20, 50, 100, 200 L containers. 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)

Warranty

The ink's quality is warranted based on state-of-the-art QA, production and storage methods. However, printing results are beyond the ink manufacturer's control. While all information on use of this product is provided in good faith, the customer bears sole responsibility regarding the end product's use. Liabilities, if any, associated with using this product are limited to the purchase value of the product.

Validated Equipment

For digital inkjet technology by: Canon, Screen, Ricoh, HP, Kodak, Kyocera, Konica-Minolta, FujiDimatix, Impika, Xerox, Domino, Epson, KBA, RRD, MCS, Amica, HP SPS TIJ 2.5/4.0 and many more.



Sample 1: INKcrypt TripWire™ protected check front and back under visible light.



Sample 2: INKcrypt TripWire™ protected check front and back under UV light.

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