

SECURE YOUR FUTURE

Microtaggant® Security Inks

FlintGroup
Narrow Web

PARTNERSHIP

In 2005, Flint Group Narrow Web formed a strategic partnership with Microtrace to better meet your security needs. Microtrace provides identification, authentication and security solutions to companies and organizations worldwide, including foreign and domestic government agencies. First engineered by 3M, the Microtaggant® was originally developed for the post detonation tracing of explosives. Since acquiring the Microtaggant technology in 1985, Microtrace has refined and enhanced it for use in a wealth of applications.

The inclusion of the Microtrace Microtaggant technology in printing inks allows for simple print application via flexographic or screen print processes. The technology may be used to address a variety of issues including: counterfeiting, product diversion and product liability and warranty concerns.

Flint Group Narrow Web formulates the Microtaggant into a security ink for either UV curable flexographic or rotary screen print methods. Flint Group Narrow Web has an exclusive arrangement worldwide in the narrow web market to manufacture, sell, distribute and provide technical support to printers qualified to use the Microtaggant Security Ink.

MICROTAGGANT INK TECHNOLOGY

The Microtaggant Identification Particle is a microscopic, traceable, anti-counterfeit technology that is highly versatile in its use and application.

Microtaggant Security Ink is:

- Patented technology, offers Exclusivity at multiple levels
- Cost effective to use and detect
- Secure and easy to use

Microtaggant Characteristics:

- Each code particle is made of multiple colored layers which form a unique numeric code sequence.
 - Millions of unique code sequences available.
- Composed of durable, inert plastic material that is chemically and thermally stable.
- Multiple “energy sensitive” taggant technologies may be incorporated into the Microtaggant structure.

Reading / Detecting Microtaggants on Printed labels / packaging

- Undetectable to the untrained/unaided eye.
 - A small spot or line approximately 1/4 inch is blended in the graphic design.
- UV light can trigger a fluorescent response.
- Specific laser light frequency triggers color response
- Detected with an inexpensive hand held audible detector
- Read using a microscope with appropriate top lighting and magnification of at least 100X
- More sophisticated handheld readers can be used to visually or audibly detect Energy Sensitive taggants if incorporated in the structure of the Microtaggant.

Types of Microtaggants Inks:

- **IR** - A rare IR material is incorporated within the structure of the particle.
- **Energy sensitive**- There are a wide variety of energy sensitive taggant technologies that can be incorporated in Microtaggants. Other nano / taggant technologies offer only a single level of authentication through visual, spectral or other analytical methods. Please contact your rep for further information.
- **High Temperature**- stable at 430°C for extended exposures (*Standard Microtaggant stable to 350°C for short exposures*).
- **Bio Compatible**- Meets the standards for ISO 10993.

Microtaggant Security Ink Benefits

- Microtaggant Security Ink is press ready and available in UV curable ink technology for flexographic or rotary screen printing.
- Multiple nano / taggant technologies may be incorporated in the Microtaggant Security Ink providing multiple levels of security.
- Particles detected and read using inexpensive, handheld devices in the field. If Energy Sensitive materials are used, more sophisticated analysis is required.
- Microtaggants are unique code sequences for each customer or application. Each customer may have one unique code sequence for yes/no authentication and identification or many unique codes to identify batch, manufacturer, intended market, time, etc.
- Pattern recognition can be utilized to create a unique “fingerprint” on each individual item that can not be duplicated

For more information on the advantages of the Microtrace Microtaggant technology, contact Flint Group at 800-328-7838.

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MICROTRACE
Authenticity. Identity. Security. Worldwide Solutions since 1985.

