

INDUSTRIAL INKS & SOLVENTS

UNDERSTANDING THE PRODUCT RANGE FROM LEIBINGER, SQUID INK, AND NORWIX



INTRODUCTION

In industrial coding and marking, ink selection is as critical as the printing technology itself. The right ink formulation ensures durability, adhesion, readability, and compliance with industry standards. From high-speed continuous inkjet (CIJ) printing to thermal inkjet (TIJ) and UV-curable applications, selecting the appropriate ink type directly impacts production efficiency and product integrity.

At USInks.com, we supply high-quality industrial inks and solvents from Leibinger, Squid Ink, and Norwix—leaders in reliable, high-performance coding and marking solutions. This white paper provides an in-depth look at the various ink types, their applications, advantages, and compatibility with different substrates.





1 LEIBINGER INDUSTRIAL INKS & SOLVENTS

1.1 Continuous Inkjet (CIJ) Inks

Leibinger produces high-performance CIJ inks designed for use in Leibinger's continuous inkjet printers, ensuring optimal print quality, adhesion, and longevity.

Types of CIJ Inks from Leibinger:

- ✓ MEK-Based Inks Fast-drying, high-contrast inks used for non-porous materials like plastics, glass, metals, and films.
- **Ethanol-Based Inks** Less volatile alternative to MEK, offering **good adhesion on porous and non-porous surfaces**.
- Acetone-Based Inks Ultra-fast drying with exceptional adhesion, used in high-speed production lines.
- Pigmented Inks Designed for high-contrast printing on dark or colored backgrounds, commonly used in automotive, electronics, and aerospace industries.
- Food-Grade Inks Compliant with food safety regulations, ideal for direct or indirect food packagingapplications.
- UV-Readable Inks Invisible under normal light but fluoresces under UV light, used for anti-counterfeiting and security marking.



Leibinger IQ Jet Ink & Solvent Cartridge Housing



Leibinger IQ Jet C.I.J Printer





1.2 Leibinger Solvents & Additives

Leibinger solvents are used for **printhead cleaning and ink dilution** in CIJ printers, ensuring consistent performance and **preventing nozzle clogs**.

- Make-up Solvents Used to maintain viscosity and extend ink life in continuous operation.
- Cleaning Solutions Essential for preventing dried ink buildup, keeping printheads clear for consistent performance.

Best Applications for Leibinger Inks & Solvents:

- ✓ High-speed beverage and food packaging
- ✔ Printing on plastic, metal, glass, and flexible packaging
- ✓ Traceability codes, expiration dates, and batch numbers



2.1 CIJ, DOD, and High-Resolution Inkjet Inks

Squid Ink provides a diverse ink portfolio for CIJ (continuous inkjet), DOD (drop-on-demand), and high-resolution inkjet printing applications.

Types of Squid Ink Industrial Inks:

- CIJ Solvent-Based Inks Compatible with Squid Ink's continuous inkjet printers, available in MEK, ethanol, and acetone-based formulas for quick drying and superior adhesion.
- **DOD Large Character Inks** Used for case coding and secondary packaging, with options in solvent-based, oil-based, and pigmented formulations.
- UV-Curable Inks Designed for high-resolution UV inkjet printing, providing instant curing and superior adhesion on coated and non-porous surfaces.
- Water-Based Inks Ideal for corrugated cases, paper-based substrates, and porous materials, offering low-VOC emissions and environmentally friendly printing.











Squid Ink CoPilot TIJ Ink Cartridges

2.2 Squid Ink Solvents & Cleaners

- ✓ Make-Up Fluids Maintain ink viscosity and proper formulation in CIJ systems.
- Cleaning Solutions Designed for removing dried ink and preventing printhead blockages.
- Specialty Additives Used to enhance ink properties, improve adhesion, and ensure consistent performance across different environmental conditions.

Best Applications for Squid Ink Products:

- ✓ Industrial coding for packaging, wood, and metal parts
- ✓ Large character case coding & pallet marking
- UV-cured product marking for high-resolution graphics





3 NORWIX AQUEOUS INKS

3.1 Aqueous TIJ Inks

Norwix specializes in aqueous-based thermal inkjet (TIJ) inks, used in high-resolution product marking, barcode printing, and secondary packaging applications. These inks are designed for use in Norwix TIJ printers, offering exceptional print quality with minimal maintenance.

Types of Norwix Aqueous Inks:

- Standard Aqueous Inks Water-based formulations for porous surfaces like cardboard, paper, and wood.
- Fast-Dry Aqueous Inks Developed for semi-porous materials, allowing for quicker absorption and reduced smudging.
- Food-Grade Aqueous Inks Certified for direct food contact or indirect packaging applications, ensuring safe and compliant marking.
- High-Contrast Pigmented Aqueous Inks Formulated for dark surfaces, providing strong readability even in low-light conditions.



Norwix Aqueous TIJ Ink Cartridge



Norwix UC22 TIJ Case Coder

3.2 Advantages of Norwix Aqueous Inks

- Environmentally Friendly No volatile organic compounds (VOCs), reducing emissions and workplace hazards.
- No Solvent Maintenance Unlike CIJ systems, TIJ does not require solvent flushing or regular viscosity adjustments.
- High Resolution Up to 600 dpi, ensuring clear, readable barcodes and text.

Best Applications for Norwix Aqueous Inks:

- ✓ High-quality carton and case coding
- ✓ Food and beverage secondary packaging
- ✓ Warehouse and logistics barcode printing







CHOOSING THE RIGHT INK FOR YOUR APPLICATION

Each industrial ink formulation is designed to meet specific performance requirements, from fast-drying high-speed coding to UV-resistant, durable marking for outdoor applications. Below is a quick comparison of the available ink types from Leibinger, Squid Ink, and Norwix.

Ink Type	Leibinger (CIJ)	Squid Ink (CIJ, DOD, UV)	Norwix (TIJ)
MEK-Based	✓ Fast-drying, high adhesion	✓ Used for fast-dry CIJ marking	■ Not Available
Ethanol-Based	Moderate-dry alternative	✓ Lower VOC alternative	▼ Not Available
Acetone-Based	✓ Ultra-fast drying	✓ High-speed marking	■ Not Available
Pigmented Inks	✓ High-contrast for dark surfaces	DOD and large character printing	Water-based pigmented for porous surfaces
Food-Grade Inks	✓ FDA-compliant inks available	✓ Food-safe options for TIJ & CIJ	Safe for direct food contact
UV-Curable Inks	■ Not Available	✓ Used in Squid Ink UV LED printers	■ Not Available
Water-Based Aqueous Inks	■ Not Available	✓ For case coding	✓ High-resolution for porous surfaces





CONCLUSION:

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Selecting the right ink or solvent is critical for achieving optimal print performance, longevity, and compliance. Whether you need high-speed CIJ inks, durable solvent-based formulations, UV-curable inks, or eco-friendly aqueous solutions, USInks.com offers top-tier products from Leibinger, Squid Ink, and Norwix.

Our team provides expert guidance on ink selection, troubleshooting, and system integration to ensure that your coding and marking operations run smoothly and efficiently.





CONTACT US TODAY TO DISCUSS HOW WE CAN HELP OPTIMIZE YOUR CODING, MARKING, AND LABELING OPERATIONS!

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