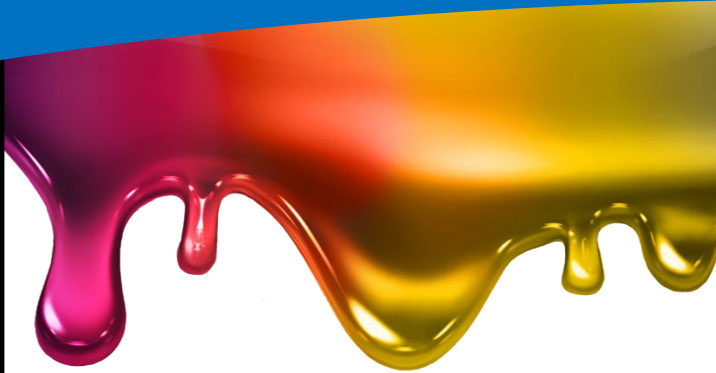


In This Issue

## Using Third-Party Inks



### Quick Tips

- Color settings and icc profiles made for OEM ink at the manufacturer or inhouse will not apply to third-party inks.
- Newly installed 3rd-party inks will require extra production time to adjust color when trying to match previous work or repeat jobs.

## The Risks of Using Third-Party Ink in Large Format UV Printers

In large-format printing, UV printers are a game-changer, offering high-quality, durable prints on the widest variety of substrates. However, when it comes to choosing ink, some businesses opt for third-party alternatives instead of the manufacturer's recommended inks. While the cost savings might seem attractive in the short-term, using third-party ink in a large-format UV printer comes with significant risks that can impact print quality, printer longevity, and overall efficiency.

### Print Quality and Color Consistency Issue

One of the biggest concerns with third-party UV inks is the inconsistency in print quality. Unlike OEM (Original Equipment Manufacturer) inks, third-party inks are not formulated to exact specifications for specific printers. They are generally a compromise formulation, intended to perform at a minimum in the largest range of printer brands. This can result in:

- Poor adhesion to substrates.
- Inconsistent color reproduction, making it difficult to match brand and target colors.
- Banding, streaks, or uneven ink distribution.

For businesses that rely on high-quality output, these issues can damage customer relationships and lead to costly reprints.

### Printer Damage and Increased Maintenance Costs

OEM inks are designed to work seamlessly with the printer's components, ensuring smooth operation and longevity. Most are optimized for the specific print heads, curing lamps, voltages and wavelengths being developed by the manufacturer. Third-party inks, on the other hand, may have different chemical compositions that can:

- Clog printheads, causing frequent malfunctions.
- Accelerate wear on key components like pumps, tubing, and seals.
- Require more frequent maintenance and downtime.
- In worst case scenario, damage the print head.

These risks lead to higher operational costs and potential voiding of manufacturer warranties, leaving businesses to cover expensive repairs out of pocket.

## Ink Set Incompatibility and Long-Term Effects

Using ink sets that are not designed to work together can cause severe problems over time. The removal and installation from OEM ink to a third-party product is a time-consuming process and there is no real way to ensure one is fully removed before the other is introduced. Inks from different manufacturers may react unpredictably when mixed, leading to:

- Chemical reactions that produce unwanted byproducts, affecting print quality.
- Ink separation or coagulation and gelling, which can clog ink lines and nozzles.
- Unstable UV curing, causing prints to fade, crack, or deteriorate prematurely.

Over the long term, these issues can result in frequent breakdowns, necessitating costly component replacements and reducing the overall lifespan of the printer. Additionally, repeated exposure to chemically unstable inks can corrode internal parts, making repairs more complex and expensive.

## Health and Safety Concerns

UV inks contain specific chemical formulations that undergo rigorous safety testing. Third-party inks may not meet the same safety and regulatory standards, potentially exposing operators to harmful fumes or skin contact risks. Poorly formulated inks can also cause excessive emissions, affecting workplace air quality and environmental compliance.

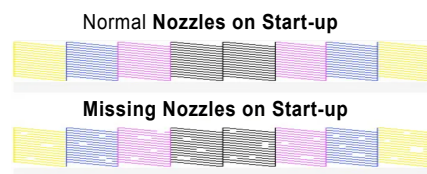
## Warranty and Support Limitations

Most printer manufacturers explicitly state that using non-OEM inks can void the warranty. This means if a printer suffers damage due to third-party ink usage, the manufacturer may refuse to cover repairs or replacements. Additionally, manufacturers often provide technical support based on their proprietary ink formulations, meaning troubleshooting problems with third-party ink can be more difficult.

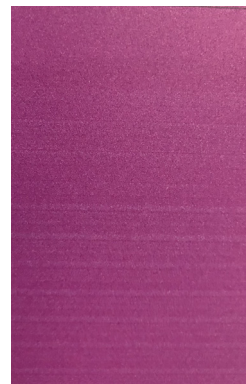
## Conclusion: Is the Cost Savings Worth the Risk?

While third-party inks may appear to offer cost savings upfront, the risks they pose—ranging from compromised print quality to expensive printer repairs—often outweigh the benefits. Businesses using large-format UV printers should carefully consider the long-term impact of using non-OEM inks and prioritize reliability, quality, and manufacturer support over short-term savings.

For those looking to maximize the lifespan of their equipment and maintain consistent print quality, sticking with OEM inks remains the safest and most efficient choice.



Persistent missing coverage  
in 1 or more colors



Cracking, Peeling and  
Lack of Adhesion