

Printcolor USP Class VI certified Ink Systems for Maximum Product Safety



Printcolor USP Class VI certified ink systems meet the most stringent requirements for medical applications. They are biocompatible, FDA-compliant, and specifically developed for use in medical devices. This ensures maximum safety and reliability for your products.

What does USP Class VI mean?

USP Class VI is the highest classification of the United States Pharmacopeia (USP) for biological reactivity. It ensures, through testing across the full spectrum of toxicology, that materials such as plastics, elastomers, and printing inks are **non-toxic** and biologically **inert**.

The extensive tests are conducted by the American research organization **TOXiKON** or by an accredited testing laboratory. They **include the full scope of toxicological assessments**: acute, subchronic, and chronic toxicity, reproductive toxicity, genetic toxicology, carcinogenicity, pharmacokinetics, toxicokinetics, bioavailability, and ADME (Absorption, Distribution, Metabolism, Excretion).

The tests conducted by TOXiKON are **based on the conditions and objectives of the FDA** (U.S. Food and Drug Administration) and are certified in accordance with the applicable USP standards.

The certification includes three key tests:

1. **Systemic Injection**
2. **Intracutaneous Toxicity**
3. **Implantation Test**

These evaluations simulate contact with the human body and ensure **maximum safety and biocompatibility**.

Why is this important?

Inks that pass USP Class VI are approved for direct and indirect contact with human tissue. They are suitable for:

- › **Medical devices of Classes II and III**
- › **Components for invasive or implantable devices**
- › **Products requiring sterilization or chemical resistance**

The most widely used Printcolor inks in the medical sector – Series 711-8005, Series 711-9005, Series 752-8005, Series 752-9005, Series 747-8005, Series 747-9005, and the MS colors of Series 786 – have been extensively tested under this rigorous procedure by TOXiKON or an accredited testing laboratory and certified for use in medical and surgical applications.

Typical Applications

- › Syringes, catheters, IV components
- › Diagnostic housings, inhalers
- › Medical control elements and labware
- › Laboratory components and surgical instruments

Material Compatibility

Our USP Class VI compliant ink systems reliably adhere to:

- › Polypropylene (PP)
- › Polyethylene (PE & HDPE)
- › Polycarbonate (PC)
- › ABS
- › Treated metals and coatings

Your Benefits at a Glance

- › USP Class VI certified
- › FDA compliant
- › Sterilization resistant
- › Suitable for cleanroom applications
- › Excellent adhesion and chemical resistance

Overview of Printcolor USP Class VI Certified Ink Series

Printcolor **Series 711** – 1K-Pad Printing Ink

- › Fast-drying, high opacity
- › Suitable for plastics, glass and metal
- › Ideal for medical-grade plastics such as ABS, SAN, copolymers, PVC, Polystyrene

Printcolor **Series 747** – UV Pad Printing Ink

- › Perfect for cleanroom environments
- › UV-curable, ready to use immediately, wet-on-wet printing without intermediate drying
- › For rigid PVC, ABS, SAN and copolymers, PA, PC and Polystyrene

Printcolor **Series 752** – 1K/2K-Universal Ink

- › For demanding applications on plastics/metals
- › When chemical resistance or aggressive sterilization is required
- › For rigid PVC, ABS, SAN and copolymers, PA, PC, Polystyrene and coated metals

Printcolor **Series 786** – 2C Pad Printing Ink

- › User-friendly, highly glossy, extremely resistant, and highly opaque
- › Based on raw materials free of PAHF
- › For PMMA, rigid PVC, coatings, PA, PE, PP, Tritan, and metals

Ready for the next step?

Request your sample now or get in touch with our sales team directly:

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