

No-Tox® **Products**

Technical Data

FLEXICRAFT® NPS

(NPS-16000 SERIES)

FT09 (08/14)

Product Type: Low viscosity, water-reducible water-based ink.

General Description: NPS Series inks are designed specifically for use on flexographic

printing units integrated with form-fill-seal equipment. They are high gloss inks with excellent printability and stability, ideally suited for the

in-line printing of heat sealable plastic film lidding stocks.

Stocks: NPS inks exhibit excellent adhesion, gloss and abrasion resistance

when used on treated polyolefin films, polyesters, Tyvek (DuPont,

USA), and surgical kraft and other medical grade papers.

Plates and Rollers: Natural rubber and photopolymer plates and rollers are acceptable.

Additives and Diluents*: Normally supplied "press-ready" at a viscosity of 18-25 seconds, Zahn

Cup #2, @ 25°C. Although normally not required, the following diluents may be used to maintain viscosity or adjust drying rate, if necessary.

Recommended Solvents: The following solvents and blends are intended only as a guide.

Other diluents and/or ratios may be better suited for your specific application. For additional assistance contact our Technical Service

Department.

Fast: 50% Water

50% Isopropyl Alcohol

Normal: 80% Water

20% Isopropyl Alcohol

Slow: 50% Propylene Glycol

50% Isopropyl Alcohol

Caution: Never add alcohol alone. Premix with water and add slowly to ink while stirring.

Special Handling Procedures:

1. pH: Due to volatility of amines used, pH may drop during extended runs resulting in thickening of ink and poor print quality. Maintain pH at 8.8-9.7. Check every 2 – 4 hours with pH meter and adjust to proper range by adding

28% ammonia solution, a Colorcon supplied pH/viscosity modifier or household <u>non-sudsy</u> ammonia. A small amount of ammonia can cause substantial changes in pH. Add only a few drops at a time, mix

and recheck pH. Do not add excess.

*Note: FDA acceptability is based on the ink as supplied or diluted as described in this bulletin. No other materials should be added unless specifically recommended by Colorcon.

2. Viscosity: Increases in viscosity can occur during extended runs as a result of evaporation of amines or alcohol solvents in ink. First check pH and adjust as described above. If viscosity is still too high, add diluents as recommended to bring viscosity to 18-25 seconds, Zahn Cup #2.

Note:

Use an ink reservoir cover, fountain cover and/or pump covers, if possible, to reduce evaporation of volatile amines and solvents.

- 3. Drying: There is a fine balance required in formulating NPS inks. The inks must dry slow enough so as to remain "open" on anilox rolls and printing plates, yet dry rapidly once printed onto non-porous substrates. For this reason, it may be necessary to incorporate an airflow drying unit into the printing/packaging line to adequately dry these inks once printed onto the substrate.
- 4. Clean-Up: Remove ink from fountain and rinse all parts with warm water. If ink has dried, use a mixture of water with a small amount of ammonia and alcohol. Dry parts thoroughly to prevent corrosion.

Color Availability:

Wide range of shades can be produced, including most customer specified logo or corporate colors.

FDA Acceptability*:

All components of NPS series inks are sanctioned by the FDA as acceptable for <u>minimal</u> or <u>indirect</u> food contact. Additionally, these inks can be submitted to the FDA for inclusion in Colorcon No-Tox Products' Drug Master File #17155 and are manufactured under strict cGMP guidelines in our dedicated facility.

