

## **Bid List No. 0751**

## **SPECIFICATION**

### **Property No. 259276**

#### **Fountain Solution Concentrate for Web Offset Presses**

#### **General Requirements**

The fountain etch concentrate must be formulated to contain organic wetting; agents or other surface tension lowering agents that will eliminate the need for isopropyl alcohol on heat set web offset presses using continuous flow dampening systems. Current equipment at the Government Printing Office consists of two Hantscho 35" x 50" (890 mm x 1270 mm) two color perfecter presses and three Hantscho 25" x 38" (635 mm x 965 mm) single color perfecter presses with refrigerated Dahlgren dampening systems. The fountain solution must be compatible with black and colored inks used at GPO to print line work, half tones, and solids. The product shall not cause appreciable plate wear on additive type anodized aluminum offset plates or negative working subtractive photopolymer offset plates such as the Kodak Polymatic L plate.

#### **Specific Requirements**

The product shall contain gum arabic, no synthetic substitutes. It shall contain no phosphoric acid or any of the toxic pollutants designated in 40 CFR Part 401.15 and subsequent EPA regulations. Specific maximum limits on metals are:

Cadium (total)...0.68 mg/L  
Chromium (total)...3.96 mg/L  
Copper (total)...2.55 mg/L  
Lead (total)...0.34 mg/L  
Nickel (total)...2.32 mg/L  
Silver (total)...0.57 mg/L  
Zinc (total)...2.38 mg/L  
Mercury (total)...none detected

The above limits refer to the product at the working concentration. Working concentration of product: 6.0 ounces per gallon maximum (48 mL/L)

**pH:** 3.5 to 5.0 at working concentration in tap water having an average hardness of 110-140 parts per million, as calcium carbonate.

**Conductivity:** The increase in conductivity over tap water should be at least 100 micromhos for every ounce per gallon working concentration.

VOC Content of working solution...1% max

Flash point (Tag Closed Cup) of concentrate... 140°F (60°C) min

**Shelf life:** one-year minimum when stored at 40°F to 80°F (10C to 26.7°C). During this time the etch concentrate should not sour or separate. Each container should be labeled with an expiration date.

**Sample requirement:** A 5-gallon sample and Material Safety Data Sheet are required for testing. If the initial performance test is satisfactory a drum will be required for a week's extended testing.

The following products have been tested and are satisfactory:

Graphex Litho Systems: Unitrol No. 130  
Anchor/Lith KemKo: Emerald GPO #2642  
Printers Service: Prisco 2351 H5B  
PDI Chemicals: Omega Fountain Solution U558, FS-79