

**Brilliant Blue G TS**—Transfer 25 mg of brilliant blue G to a 100-mL volumetric flask, add 12.5 mL of alcohol and 25 mL of phosphoric acid, dilute with water to volume, and mix.

**Bromine TS (Bromine Water)**—A saturated solution of bromine, prepared by agitating 2 to 3 mL of bromine with 100 mL of cold water in a glass-stoppered bottle, the stopper of which should be lubricated with petrolatum. Store it in a cold place, protected from light.

**Bromine–Sodium Acetate TS**—Dissolve 100 g of sodium acetate in 1000 mL of glacial acetic acid, add 50 mL of bromine, and mix.

**p-Bromoaniline TS**—Add 8 g of p-bromoaniline to a mixture of 380 mL of thiourea-saturated glacial acetic acid, 10 mL of sodium chloride solution (1 in 5), 5 mL of oxalic acid solution (1 in 20), and 5 mL of dibasic sodium phosphate solution (1 in 10) in a low-actinic glass bottle. Mix, and allow to stand overnight before using. Protect from light, and use within 7 days.

**Bromocresol Blue TS**—Use *Bromocresol Green TS*.

**Bromocresol Green TS**—Dissolve 50 mg of bromocresol green in 100 mL of alcohol, and filter if necessary.

**Bromocresol Green–Methyl Red TS**—Dissolve 0.15 g of bromocresol green and 0.1 g of methyl red in 180 mL of alcohol, and dilute with water to 200 mL.

**Bromocresol Purple TS**—Dissolve 250 mg of bromocresol purple in 20 mL of 0.05 N sodium hydroxide, and dilute with water to 250 mL.

**Bromophenol Blue TS**—Dissolve 100 mg of bromophenol blue in 100 mL of diluted alcohol, and filter if necessary.

**Bromothymol Blue TS**—Dissolve 100 mg of bromothymol blue in 100 mL of diluted alcohol, and filter if necessary.

**Buffered Acetone TS**—See *Acetone, Buffered, TS*.

**Calcium Chloride TS**—Dissolve 7.5 g of calcium chloride in water to make 100 mL.

**Calcium Hydroxide TS**—Use *Calcium Hydroxide Topical Solution* (USP monograph).

**Calcium Sulfate TS**—A saturated solution of calcium sulfate in water.

**Ceric Ammonium Nitrate TS**—Dissolve 6.25 g of ceric ammonium nitrate in 10 mL of 0.25 N nitric acid. Use within 3 days.

**Chloral Hydrate TS**—Dissolve 50 g of chloral hydrate in a mixture of 15 mL of water and 10 mL of glycerin.

**Chlorine TS (Chlorine Water)**—A saturated solution of chlorine in water. Place the solution in small, completely filled, light-resistant containers. Chlorine TS, even when kept from light and air, is apt to deteriorate. Store it in a cold, dark place. For full strength, prepare this solution fresh.

**Chromotropic Acid TS**—Dissolve 50 mg of chromotropic acid or its disodium salt in 100 mL of 75% sulfuric acid, which may be made by cautiously adding 75 mL of sulfuric acid to 33.3 mL of water.

**Cobalt–Uranyl Acetate TS**—Dissolve, with warming, 40 g of uranyl acetate in a mixture of 30 g of glacial acetic acid and sufficient water to make 500 mL. Similarly, prepare a solution containing 200 g of cobaltous acetate in a mixture of 30 g of glacial acetic acid and sufficient water to make

500 mL. Mix the two solutions while still warm, and cool to 20°. Maintain the temperature at 20° for about 2 hours to separate the excess salts from solution, and then pass through a dry filter.

**Cobaltous Chloride TS**—Dissolve 2 g of cobaltous chloride in 1 mL of hydrochloric acid and sufficient water to make 100 mL.

**Congo Red TS**—Dissolve 500 mg of congo red in a mixture of 10 mL of alcohol and 90 mL of water.

**m-Cresol Purple TS**—Dissolve 0.10 g of metacresol purple in 13 mL of 0.01 N sodium hydroxide, dilute with water to 100 mL, and mix.

**Cresol Red TS**—Triturate 100 mg of cresol red in a mortar with 26.2 mL of 0.01 N sodium hydroxide until solution is complete, then dilute the solution with water to 250 mL.

**Cresol Red–Thymol Blue TS**—Add 15 mL of thymol blue TS to 5 mL of cresol red TS, and mix.

**Crystal Violet TS**—Dissolve 100 mg of crystal violet in 10 mL of glacial acetic acid.

**Cupric Acetate TS**—Dissolve 100 mg of cupric acetate in about 5 mL of water to which a few drops of acetic acid have been added. Dilute to 100 mL, and filter, if necessary.

**Cupric Acetate TS, Stronger (Barfoed's Reagent)**—Dissolve 13.3 g of cupric acetate in a mixture of 195 mL of water and 5 mL of acetic acid.

**Cupric-Ammonium Sulfate TS**—To cupric sulfate TS add ammonia TS, dropwise, until the precipitate initially formed is nearly but not completely dissolved. Allow to settle, and decant the clear solution. Prepare this solution fresh.

**Cupric Citrate TS**—Dissolve 25 g of cupric sulfate, 50 g of citric acid, and 144 g of anhydrous sodium carbonate in water, and dilute with water to 1000 mL.

**Cupric Citrate TS, Alkaline**—With the aid of heat, dissolve 173 g of dihydrated sodium citrate and 117 g of monohydrated sodium carbonate in about 700 mL of water, and filter through paper, if necessary, to obtain a clear solution. In a separate container dissolve 17.3 g of cupric sulfate in about 100 mL of water, and slowly add this solution, with constant stirring, to the first solution. Cool the mixture, add water to make 1000 mL, and mix.

**Cupric Citrate TS 2, Alkaline**—With the aid of heat, dissolve about 173 g of sodium citrate dihydrate and 117 g of sodium carbonate monohydrate in about 700 mL of water, and filter. In a second flask, dissolve about 27.06 g of cupric sulfate ( $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ ) in about 100 mL of water. Slowly combine the two solutions while stirring, and dilute with water to 1000 mL.

**Cupric Iodide TS, Alkaline**—Dissolve 7.5 g of cupric sulfate ( $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ ) in about 100 mL of water. In a separate container dissolve 25 g of anhydrous sodium carbonate, 20 g of sodium bicarbonate, and 25 g of potassium sodium tartrate in about 600 mL of water. With constant stirring, add the cupric sulfate solution to the bottom of the alkaline tartrate solution by means of a funnel that touches the bottom of the container. Add 1.5 g of potassium iodide, 200 g of anhydrous sodium sulfate, 50 to 150 mL of 0.02 M potassium iodate, and sufficient water to make 1000 mL.

**Cupric Oxide, Ammoniated, TS (Schweitzer's Reagent)**—Dissolve 10 g of cupric sulfate in 100 mL of water, add sufficient sodium hydroxide solution (1 in 5) to precipitate the copper hydroxide, collect the latter on a filter, and wash