

Blueprint on Fabric

Paul's "recipe": $\frac{1}{2}$ gallon of H₂O 2 qt x 1 L/1.057 qt = 1.89 L (1890 mL)

8 oz ferric ammonium citrate 8 oz. x 1g/.03527oz = 227 g

4 oz of potassium ferricyanide 4 oz x 1g/.03527 oz = 113 g

JChemEd "recipe":

Soln A: 2.0 g ferric ammonium citrate in 10 mL dist. H₂O (keeps 1 week in a brown bottle)

Soln B: 0.8 g potassium ferricyanide in 10 mL dist. H₂O (keeps 1 month in a brown bottle)

Mix equal amounts of A & B about 1 hour before applying; 20 mL is enough to cover 15-20 sheets of 8 in x 10 in paper.

Comparison of amounts:

	<u>Paul's</u>	<u>JChemEd</u>
Ferric ammonium citrate	226g/1890 mL = 1.2 g/10 mL	2.0 g/10 mL
Potassium ferricyanide	113g/1890 mL = 0.6 g/10 mL	0.8 g/10 mL

(The JChemEd amounts give a slightly higher proportion of ferric ammonium citrate: 2.5 times the potassium ferricyanide compared to 2 times. The JChemEd amounts are also slightly more concentrated.)

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To make my solutions, I used Paul's proportions but made separate solutions and did not combine them until about 1 hour before using:

To make 2 L of "developing solution":

Soln A: 240 g of ferric ammonium citrate in 1 L of solution

Soln B: 120 g of potassium ferricyanide in 1 L of solution

To make 100 mL of "developing solution"

Soln A: 12 g of ferric ammonium citrate in 50 mL of solution

Soln B: 6 g of potassium ferricyanide in 50 mL of solution