Drug Chemistry Section
Drug Chemistry Procedure Manual
Effective Date: November 15, 1999

Modification of A-10
Prepared By: N.H. Gregory
Approved By: I. L. Allcox
Supercedes: September 1, 1996

Name of Procedure:

Preliminary Tests Silver Nitrate Reagent

Suggested Uses:

The Silver Nitrate reagent consists of a solution of silver nitrate and water. This reagent forms a precipitate with Halide ions.

Apparatus Needed to Perform Procedure Including Preparation of Reagent:

Fume hood
Gloves
Eye protection
Laboratory coat
Pipet with bulb
Graduated cylinder
50ml beaker
Glass stirring rod
Silver Nitrate
Water
Funnel
Reagent bottle
Porcelain spot plate
Spatula
Culture tube (6 X 50mm)

Formula for Preparing Reagent:

- 1. Weigh out 1 gram of silver nitrate.
- 2. Dissolve in 20 milliliters of water.
- 3. Pour solution into a reagent bottle.
- 4. Properly label reagent bottle.

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Quality Control:

A quality control check of this reagent will be performed using a known standard of sodium chloride and following the application procedure listed below.

Expiration Date of Chemical Reagent:

No expiration date. Reagents need to be properly contained in a sealed container and stored in a cool place.

<u>Application of Procedure on Evidence</u>:

- 1. Place approximately 0.1 milligram sample in a culture tube (6 X 50mm) with a spatula.
- 2. Dissolve the sample in 1-2 drops of distilled water.
- 3. Add 1-2 drops of silver nitrate solution.
- 4. Observe for the formation of a precipitate.
- 5. Record results.

Safety Concerns:

Always wear eye protection and laboratory coat when preparing this reagent. A laboratory coat should be worn when using this reagent for color tests.

Literature References:

Butler, William P., Methods of Analysis, IRS Publication #341, 1966, p. 137.