

**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.

**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.

**Application of Procedure on Evidence:**

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