

Name of Procedure:

Preliminary Tests
Potassium Permanganate Reagent

Suggested Uses:

The Potassium Permanganate reagent consists of a solution of potassium permanganate in water. The solution is discolored by compounds containing reactive double bonds and other functional groups.

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
Sulfuric acid (concentrated)
Potassium permanganate
Funnel
Reagent bottle
Porcelain spot plate
Spatula
Water
Culture tube (6 X 50mm)

Formula for Preparing Reagent:

1. Weigh out 0.3 gram of potassium permanganate.
2. Dissolve in 30 milliliters water.
3. Pour into a reagent bottle.
4. Properly label reagent bottle.

Quality Control Check:

A quality control check of this reagent will be performed using a known standard of a barbiturate 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 potassium permanganate solution.
3. Observe for discoloration of potassium permanganate reagent color.
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:

Moffat, A. C., ed., **Clarke's Isolation and Identification of Drugs**, Pharmaceutical Press, London, 1986, p. 1170.