Name of Procedure:

Preliminary Tests
Methanolic Potassium Hydroxide Reagent

Suggested Uses:

This reagent is a useful preliminary test for cocaine. Cocaine will react with this reagent to give methyl benzoate, which has a very characteristic odor (oil of wintergreen).

Apparatus Needed to Perform Procedure Including Preparation of Reagent:

Fume hood
Gloves
Eye protection
Laboratory coat
Pipet with bulb
Graduated cylinder
250ml beaker
Glass stirring rod
Potassium hydroxide
Methanol
Funnel
Reagent bottle
Porcelain spot plate
Spatula

Formula for Preparing Reagent:

1. Weigh out 5 grams of potassium hydroxide into a beaker.

2. Add 100 milliliters of methanol and stir until dissolved.

3. Pour solution into reagent bottle.

4. Properly label reagent bottle.

Quality Control:

A quality control check of this reagent will be performed using a known standard of cocaine 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 1-2 drops of the reagent into a clean well on a spot plate.

2. With a spatula, add approximately 0.1 milligram of the unknown powder to the reagent in the spot plate.

3. Carefully sniff to detect if the wintergreen odor is present.

4. Record results.

Safety Concerns:

Always wear eye protection, gloves and a laboratory coat when preparing this reagent.

Eye protection and a laboratory coat should be worn when using this reagent for color tests.

Potassium hydroxide is a strong caustic and may cause severe chemical burns.

Literature References:

Moffat, A. C., ed., **Clarke's Isolation and Identification of Drugs**, Pharmaceutical Press, London, 1986, p. 141.

Jungreis, Ervin, **Spot Test Analysis**, John Wiley & Sons, 1985, p. 80.