

Drug Chemistry Section
Drug Chemistry Procedure Manual
Effective Date: September 1, 1996

Name of Procedure:

Extractions and Separations
Separation of Cocaine Base and Procaine Base

Suggested Uses:

This procedure is used to separate cocaine base and procaine base.

Apparatus Needed to Perform Procedure Including Preparation of Reagent:

Fume hood
Eye protection
Gloves
Laboratory coat
Hexane
Methylene Chloride
Test tube
Pipets, glass, disposable
Pipet bulb
Vortex mixer
Sodium Sulfate, anhydrous
Filter paper
Small beaker
Heat source

Application of Procedure on Evidence:

1. Crush 20-30 milligrams of sample and place in test tube.
2. Add 2 milliliters hexane to tube and vortex approximately two minutes.
3. Allow layers to separate and residue to settle to the bottom.
4. Decant hexane to second test tube.
5. Add approximately 10 milliliters deionized water to hexane.
6. Vortex approximately two minutes.

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Application of Procedure on Evidence (continued):

7. Remove hexane layer and dry through sodium sulfate in filter paper.
8. Evaporate hexane over moderate heat to obtain sample.

Safety Concerns:

Keep top of test tubes pointed away from face or covered while vortexing to avoid splashing in eyes or face.

Other:

If infrared of procaine is desired, extract the water solution with approximately 25 milliliters of methylene chloride and dry through sodium sulfate in filter paper.

Literature References:

Kerr, K., "A Simple Procedure for Separating Cocaine Base from Procaine Base", **MICROGRAM**, Vol. XXIII, NO. 5, MAY 1990, pp. 93-94.