

LABORATORY SERVICES BUREAU

Document: Controlled Substances Analysis Manual

Policy Number:
1550

Revision:
4

Subject: CS-SOP-49 Propylhexadrine

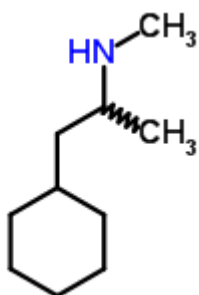
Approved:
Bell, Erica

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1. PROPYLHEXADRINE

A. Structure, Empirical Formula, Molecular Weight



Propylhexadrine
 $C_{10}H_{21}N$
MW 155.2

B. Synonyms: N, α -Dimethylcyclohexaneethanamine, hexahydrodesoxyephedrine

C. Trade Names: BenzedrexTM

D. Drug Action: Adrenergic vasoconstrictor

E. Common pharmaceutical/street forms: No medicinal use in the U.S.A. BenzedrexTM inhaler, (no longer available in the U.S.A.). The propylhexedrine can be extracted from the inhaler and injected for illicit use.

F. Solubility: Chloroform, ethanol, methanol, diethyl ether

G. Extraction: Liquid/liquid extraction

(1) Basify with 10% sodium hydroxide.

(2) Extract with diethyl ether.

(3) Evaporate diethyl ether and reconstitute with C15 methanol.

Note: If it is necessary to extract the propylhexedrine from the inhaler, soak the cotton in hot water, then follow the above liquid/liquid extraction.

H. Chemical indicator tests:

(1) Sodium Nitroprusside: Blue

(2) Cobalt thiocyanate/chloroform: Blue with extract

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I. TLC:

(1) Mobile Phase: System 1: Methanol:conc. ammonium hydroxide (100:1.5)

(2) Locator: Acidified iodoplatinate

J. GC/MS: Analyze using "Drugs1" program.

K. Comments: NA

L. Report as: Propylhexedrine, a dangerous drug.

M. References:

(1) Analytical Profiles of Amphetamines and Related Phenethylamines, CND Analytical, Inc., Auburn, AL, 1989.