



SPEware uSPE (ultraSPE) Faster / Cleaner Sample Preparation

Amphetamines from Hair

For GC or GC-MS confirmations using:
Trace-B 35mg.

1. PREPARE SAMPLE

To 0.5 ml of digest add internal standards(s) and 1ml of 100mM phosphate buffer (pH6.0). Mix/Vortex.
(Centrifuge sample for 2 minutes if cloudy.)

2. APPLY SAMPLE

Wash Trace-B column with 2ml methanol followed by 1ml H₂O. Transfer the supernatant into the Trace column and flow through the column at a flow rate of 1.0-2.0ml/minute.

3. WASH COLUMN (All wash steps flow at 2-5 ml/min)

1 ml DI H₂O
1 ml 100 mM Acetic Acid
1 ml CH₃ OH
1ml Ethyl Acetate
Dry column (2 min at 25 psi N₂)

4. ELUTE AMPHETAMINES

2.0 ml Ethyl Acetate containing 2% NH₄OH; collect eluate at 1 to 2 ml/minute.
NOTE: use 12 x 75 mm test tubes if you use the manifold for evaporation.
NOTE: Prepare elution solvent daily.

5. DRY ELUATE

Evaporate to 50-100 ul at room temp.

6. DERIVATIZE

Add 20 ul HFAA allow mixture to stand at room temp for 20 minutes.
Evaporate to approximately 20-50 ul.
Add 1ml Hexane and 1ml 50% NH₄OH (1/1)
Vortex for 30 sec, Inject 1-3 ul of Hexane layer into GC/MS

7. QUANTITATE

Inject 1 to 3 ul sample onto chromatograph.