



# SPEware uSPE (ultraSPE) Faster / Cleaner Sample Preparation

## Basic Drugs from Urine

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

### 1. PREPARE SAMPLE

To 1 ml of urine sample add internal standards(s) and 2 ml of 100 mM phosphate buffer (pH = 6.0). Mix/Vortex. (Centrifuge sample for 2 minutes if cloudy.)

### 2. APPLY SAMPLE

Transfer the supernatant into the Trace-B column and flow through the column at a flow rate of 10-20 ml/minute.

### 3. WASH COLUMN (All wash steps flow at 10-20 ml/min)

Wash each column with 1ml pH = 9.0 buffer  
(Prepared by dissolving 20 g of  $\text{KHCO}_3$  and 10g of  $\text{K}_2\text{CO}_3$  in 500 ml of water, adjust the pH to 9.0. then bring the volume to 1,000 ml.)

Then wash the column with the following reagents.

1 x 1 ml DI  $\text{H}_2\text{O}$ ;

1 x 1 ml 100 mM Acetic Acid

1 x 1 ml  $\text{CH}_3\text{OH}$ ;

Dry column (2 min at 20 psi  $\text{N}_2$ )

### 4. ELUTE BASIC DRUGS

1 x 2.0 ml Ethyl Acetate containing 2%  $\text{NH}_4\text{OH}$ ; collect eluate at 1 to 2 ml/minute.

NOTE: Prepare elution solvent daily.

### 5. DRY ELUATE

Evaporate to 50-100 ul at room temp.

### 6. DERIVATIZE

Derivatize samples as needed.

### 7. QUANTITATE

Inject 1 to 3 ul sample onto chromatograph.