



**PROPOXYPHENE IN BLOOD, PLASMA/SERUM, URINE AND TISSUE
FOR GC OR GC/MS CONFIRMATIONS USING: 200 mg
CLEAN SCREEN[®] EXTRACTION COLUMN**

Part #: ZSDAU020 without Tips or ZCDAU020 with CLEAN-THRU[®] Tips

1. PREPARE SAMPLE

To 1 mL of 100 mM phosphate buffer (pH =6.0) add internal standard*. Add 1 mL of blood, plasma/ serum or 1 g (1:4) tissue homogenate or 2 mL of urine. Mix/vortex.

Sample pH should be 6.0 ± 0.5 .

Adjust pH accordingly with 100 mM monobasic or dibasic sodium phosphate.

Centrifuge as appropriate.

2. CONDITION CLEAN SCREEN[®] EXTRACTION COLUMN

1 x 3 mL CH₃OH.

1 x 3 mL D.I. H₂O.

1 x 1 mL 100 mM phosphate buffer (pH= 6.0).

NOTE: Aspirate at < 3 inches Hg to prevent sorbent drying.

3. APPLY SAMPLE

Load at 1 mL/minute.

4. WASH COLUMN

1 x 3 mL D.I. H₂O.

1 x 1 mL 100 mM acetic acid.

1 x 3 mL CH₃OH.

Dry column (5 minutes at > 10 inches Hg).

5. ELUTE PROPOXYPHENE

1 x 3 mL CH₂Cl₂/IPA/NH₄OH (78:20:2); Collect eluate at 1 mL/minute.

NOTE: Prepare elution solvent daily. Add IPA/NH₄OH, mix, then add CH₂Cl₂

6. CONCENTRATE

Evaporate to dryness at < 40°C.

Reconstitute with 100 µL ethyl acetate.

7. QUANTITATE

Inject 1 to 2 µL onto gas chromatograph.

For MSD monitor the following ions:

<u>Compound</u>	<u>Primary***</u>	<u>Secondary</u>	<u>Tertiary</u>	<u>OTHER</u>	<u>Cerilliant #</u>
Propoxyphene-D5*	63	120	213	255, 270	P-901
Propoxyphene	58	115	208	250, 265	P-011

* Internal Standard

*** Quantitation Ion

NOTE: To improve the analysis for Norpropoxyphene, the primary metabolite of Dextropropoxyphene, add 1 drop of 35% sodium hydroxide solution to the urine sample and then after mixing bring the pH to 6 for SPE extraction. This step converts the Norpropoxyphene to Norpropoxyphene amide, a more stable compound.

For more information see the following reference:

Amalfitano G, Bessard J, Vincent F, Esseric H and Bessard G Gas Chromatographic Quantitation of Dextropropoxyphene and Norpropoxyphene in Urine after Solid Phase Extraction Journal Analytical Toxicology 20:547-554 (1996)