



LYSERGIC ACID DIETHYLAMIDE (LSD) IN URINE 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 2 mL 100 mM phosphate buffer (pH= 6.0) add internal standard. Add 5 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 LSD

1 x 3 mL CH₂Cl₂/IPA/NH₄OH (78:20:2);

Collect eluate at 1 to 2 mL/minute.

NOTE: Prepare elution solvent daily. Add IPA/NH₄OH, mix, then add CH₂Cl₂ (pH 11-12).

6. DRY ELUATE

Evaporate to dryness at < 40°C.

7. DERIVATIZE

Add 20 µL ethyl acetate and 20 µL BSTFA (with 1% TMCS)^{***}.

Overlay with N₂ and cap. Mix/vortex.

React 20 minutes at 70°C. Remove from heat source to cool.

NOTE: Do not evaporate BSTFA solution.

8. QUANTITATE

Inject 1 to 2 µL onto gas chromatograph.

For MSD monitor the following ions:

<u>Compound</u>	<u>Primary Ion^{***}</u>	<u>Secondary</u>	<u>Tertiary</u>	<u>Cerilliant #</u>
LSD-D3-TMS*	298,	296	271	L-006
LSD-TMS	395	293,	268	L-005

* Suggested internal standard for GC/MS: D₃-LSD

*** Part # SBSTFA-1-1,10,25,100

**** Quantitation ion