



**“BATH SALTS” IN URINE FOR LC-MS/MS CONFIRMATIONS  
USING: 200 MG CLEAN SCREEN<sup>®</sup> EXTRACTION COLUMN**

PART #: CSDAU206

LC-MSMS

April 26, 2011

**1. PREPARE SAMPLE**

To 1 mL of 100 mM phosphate buffer (pH= 6) add internal standard (s)\*  
Add 1 mL of urine. Add 2 mL of 100 phosphate buffer (pH= 6). Mix/vortex

Sample pH should be  $6.0 \pm 0.5$

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

Mix/vortex

Centrifuge as appropriate

**2. CONDITION CLEAN SCREEN<sup>®</sup> EXTRACTION COLUMN:**

1 x 3 mL CH<sub>3</sub>OH

1 x 3 mL DI H<sub>2</sub>O

1 x 1 mL 100 mM phosphate buffer (pH= 6)

**Note:** aspirate at < 3 inches Hg to prevent sorbent drying out.

**3. APPLY SAMPLE:**

Load sample at 1-2 mL / minute

**4. WASH COLUMN:**

1 x 3 mL DI H<sub>3</sub>O

1 x 3 mL 100 mM Acetic Acid

1 x 3 mL CH<sub>3</sub>OH

Dry column (5 minutes at > 10 inches Hg)

**5. ELUTE DRUGS:**

1 x 3 mL CH<sub>2</sub>Cl<sub>2</sub>/IPA/NH<sub>4</sub>OH (78: 20: 2 v/v)

**NOTE:** Prepare elution solvent daily. Add IPA/NH<sub>4</sub>OH, mix, then add CH<sub>2</sub>Cl<sub>2</sub>.

Collect eluate at 1-2 mL /minute.

**6. DRY ELUATES**

Evaporate eluate under a gentle stream of nitrogen < 40°C. Dissolve residue in 100 µL of mobile phase. Inject 5 µL

## INSTRUMENT CONDITIONS:

Column: 100 x 2.1 mm (3 $\mu$ m) SELECTRA<sup>®</sup> Phenyl UCT, Inc.

Mobile phase:

<u>Time/ min</u>	<u>% Acetonitrile</u>	<u>% 0.1 % Formic Acid</u>
0	50	50
5	50	50

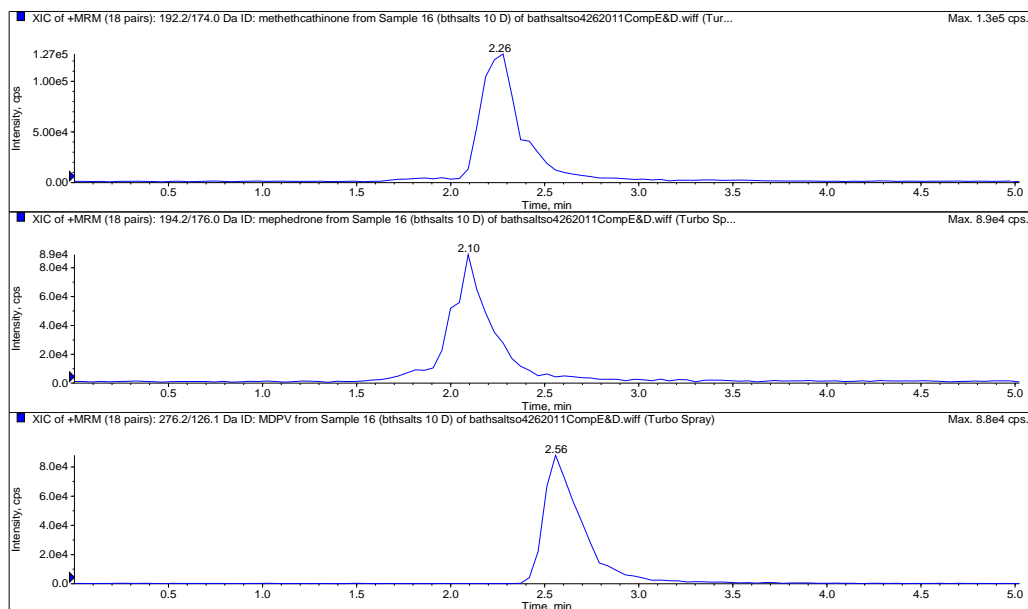
Column Temperature: 40°C

Flowrate: 0.2 mL/ min

Detector: API 4000Qtrap MS/MS.

<u>Compound</u>	<u>MRM Transition</u>	<u>Lipomed #</u>
Butylone	222.1/174	BTL-128
Flephedrone	182.2/164	FMC-1291
MDPV	276.2/126	PYR-1340
Mephedrone	194.2/146	MMC-1252
*Mephedrone-D3	197.2/150	MMC-1271
Methedrone	192.2/124	MTH-1290
Methethcathinone	192.2/174	MEC-1299
Methylone	208.1/160	MTY-1289

### Chromatogram of Methethcathinone, Mephedrone, and MDPV, extracted from urine at 10 ng/ mL



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