

CLEAN SCREEN[®]

Urine & Oral Fluid Assays For Drugs of Abuse Screening



UCT
UNITED CHEMICAL TECHNOLOGIES, INC.

Advantages of the CLEAN SCREEN[®] Multiple Analyte Reagents (MAR)

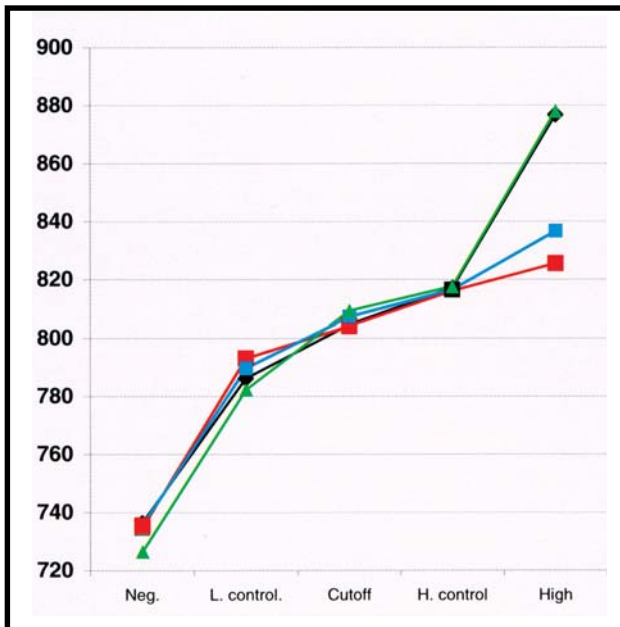
Screen 8 drugs with 3 panels

- Save time & money
- Reagents work on most existing systems
- Better than average stability
- Increased capacity
- Totally computer driven
- Linearity curves are semi-quantitative to aid in MS confirmation.

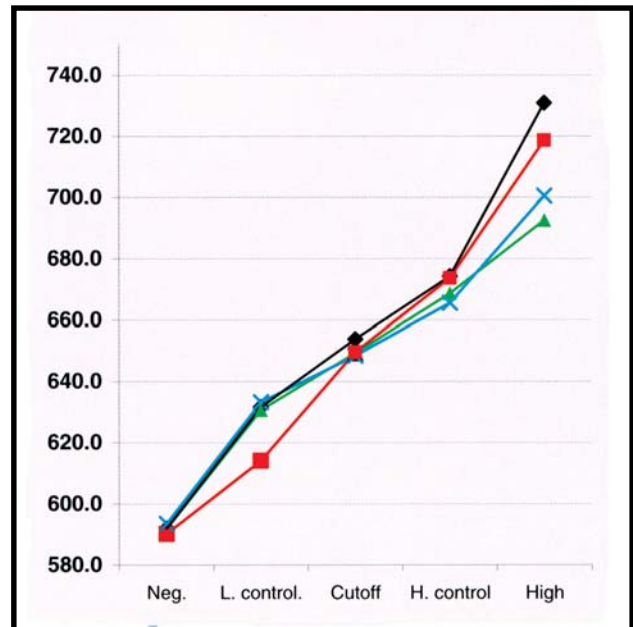
New Urine Multiple Analyte Reagents:

1. **CAMP** (Cocaine-Amphetamines-Opiates-Phencyclidine 4-in-1 assay)
2. **BMBP** (Benzodiazepines-Methadone-Barbiturates-Propoxyphene 4-in-1 assay)

These assays are designed to screen out negative samples. The higher the sample volume the more you save on time and cost.



CAMP 4-in-1 Assay



BMBP 4-in-1 Assay

Also available

Individual Urine Analyte Reagents:

Cocaine
Opiates
Cannabinoids
Amphetamines
Phencyclidine
Barbiturates
Methadone

Methadone metabolite
Propoxyphene
Ethyl Alcohol
Cotinine
Benzodiazepines
Ecstasy
Oxycodone

Urine Assay Sensitivity

Cocaine Metabolite:	4 ng/mL
Amphetamines:	30 ng/mL
Phencyclidine:	1 ng/mL
Benzodiazepines:	15 ng/mL
Methadone metabolite	15 ng/mL
Methadone:	15 ng/mL
Propoxyphene:	7.5 ng/mL
Alcohol:	linear up to 600 mg/dL
THC:	5 ng/mL
Opiates:	15 ng/mL
Barbiturates:	25 ng/mL
Ecstasy:	25 ng/mL
Oxycodone:	N/A

Oral Fluid EIA* Assay Sensitivity

Cocaine Metabolite:	2 ng/mL
Amphetamines:	3 ng/mL
Methamphetamine:	3 ng/mL
Alcohol:	1.56 mg/dL
Phencyclidine:	1 ng/mL
Opiates:	5 ng/mL
Ecstasy:	3 ng/mL
Oxycodone:	N/A

*Patent pending

Application:

Chemistry analyzers with 340 nm light source can be used to perform the assays.
Chemistry parameters for most commercial analyzers are available.
(Special modification for Hitachi series analyzers for oral fluid specimens is available.)

Product List

Catalog No. Product Name

New Multiple Analyte Assays

UCT0510	CAMP EIA Kit (500 tests/kit)
UCT0511	CAMP EIA Kit (5000 tests/kit)
UCT0610	BMBP EIA Kit (500 tests/kit)
UCT0611	BMBP EIA Kit (5000 tests/kit) (FDA pending)

Urine EIA

UCT0010	Phencyclidine EIA Kit (500 tests/kit)
UCT0011	Phencyclidine EIA Kit (5000 tests/kit)
UCT0020	Opiates EIA Kit (500 tests/kit)
UCT0021	Opiates EIA Kit (5000 tests/kit)
UCT0031	Cocaine EIA Kit (5000 tests/kit)
UCT0040	Amphetamine EIA Kit (500 tests/kit)
UCT0041	Amphetamine EIA Kit (5000 tests/kit)
UCT0070	THC (Cannabinoid) EIA Kit (500 tests/kit)
UCT0071	THC (Cannabinoid) EIA Kit (5000 tests/kit)
UCT0110	Methadone EIA Kit (500 tests/kit)
UCT0111	Methadone EIA Kit (5000 tests/kit)
UCT0120	Propoxyphene EIA Kit (500 tests/kit)
UCT0121	Propoxyphene EIA Kit (5000 tests/kit)
UCT0130	Benzodiazepine EIA Kit (500 tests/kit)
UCT0131	Benzodiazepine EIA Kit (5000 tests/kit)
UCT0140	Barbiturate EIA Kit (500 tests/kit)
UCT0141	Barbiturate EIA Kit (5000 tests/kit)
UCT0160	Ecstasy EIA Kit (500 tests/kit)
UCT0161	Ecstasy EIA Kit (5000 tests/kit)
UCT0190	Methadone Metabolite (EDDP) EIA Kit (500 tests/kit)
UCT0191	Methadone Metabolite (EDDP) EIA Kit (5000 tests/kit)
UCT0220	Ethyl Alcohol EIA Kit (500 tests/kit)
UCT0221	Ethyl Alcohol EIA Kit (5000 tests/kit)
UCT0230	Cotinine EIA Kit (500 tests/kit)
UCT0231	Cotinine EIA Kit (5000 tests/kit) (Research use only)
UCT0300	Oxycodone EIA Kit (500 tests/kit)*
UCT0301	Oxycodone EIA Kit (5000 tests/kit)*

Urine Calibrators & Controls

UCT0001	Universal Negative Calibrator
UCT0012	Phencyclidine Low Cal. (PCP 12.5 ng/mL)
UCT0013	Phencyclidine Cutoff Cal. (PCP 25 ng/mL)
UCT0014	Phencyclidine Intermediate Cal. (PCP 50 ng/mL)
UCT0015	Phencyclidine High Cal. (PCP 100 ng/mL)
UCT0017	Phencyclidine Control Level 1 (PCP 18 ng/mL)
UCT0018	Phencyclidine Control Level 2 (PCP 32 ng/mL)
UCT0022	Opiates Low Cal. (Morphine 150 ng/mL)
UCT0023	Opiates Cutoff Cal. (Morphine 300 ng/mL)
UCT0024	Opiates Intermediate Cal. (Morphine 600 ng/mL)
UCT0025	Opiates High Cal. (Morphine 1000 ng/mL)
UCT0027	Opiates Control Level 1 (Morphine 225 ng/mL)
UCT0028	Opiates Control Level 2 (Morphine 375 ng/mL)
UCT0032	Cocaine Low Cal. (BE 150 ng/mL)
UCT0033	Cocaine Cutoff Cal. (BE 300 ng/mL)
UCT0034	Cocaine Intermediate Cal. (BE 1000 ng/mL)
UCT0035	Cocaine High Cal. (BE 3000 ng/mL)
UCT0037	Cocaine Control Level 1 (BE 225 ng/mL)
UCT0038	Cocaine Control Level 2 (BE 375 ng/mL)
UCT0042	Amphetamines Low Cal. (Methamphetamine 500 ng/mL)
UCT0043	Amphetamines Cutoff Cal. (Methamphetamine 1000 ng/mL)
UCT0044	Amphetamines Intermediate Cal. (Methamphetamine 1500 ng/mL)
UCT0045	Amphetamines High Cal. (Methamphetamine 2000 ng/mL)
UCT0047	Amphetamines Control Level 1 (Methamphetamine 750 ng/mL)
UCT0048	Amphetamines Control Level 2 (Methamphetamine 1250 ng/mL)

* Not yet FDA approved

Product List

Catalog No.	Product Name
Urine Calibrators & Controls	
UCT0073	THC Cal. 20 ng/mL
UCT0074	THC Cal./Control 30 ng/mL
UCT0075	THC Cal. 50 ng/mL
UCT0076	THC Cal./Control 75 ng/mL
UCT0077	THC Cal. 100 ng/mL
UCT0078	THC Cal. 150 ng/mL
UCT0079	THC Cal. 200 ng/mL
UCT0007	THC Control 37.5 ng/mL
UCT0008	THC Control 62.5 ng/mL
UCT0009	THC Control 125 ng/mL
UCT0112	Methadone Low Cal. (Methadone 150 ng/mL)
UCT0113	Methadone Cutoff Cal. (Methadone 300 ng/mL)
UCT0114	Methadone Intermediate Cal. (Methadone 600 ng/mL)
UCT0115	Methadone High Cal. (Methadone 1000 ng/mL)
UCT0117	Methadone Control Level 1 (Methadone 225 ng/mL)
UCT0118	Methadone Control Level 2 (Methadone 375 ng/mL)
UCT0122	Propoxyphene Low Cal. (Propoxyphene 150 ng/mL)
UCT0123	Propoxyphene Cutoff Cal. (Propoxyphene 300 ng/mL)
UCT0124	Propoxyphene Intermediate Cal. (Propoxyphene 600 ng/mL)
UCT0125	Propoxyphene High Cal. (Propoxyphene 1000 ng/mL)
UCT0127	Propoxyphene Control Level 1 (Propoxyphene 225 ng/mL)
UCT0128	Propoxyphene Control Level 2 (Propoxyphene 375 ng/mL)
UCT0132	Benzodiazepine Calibrator #2/Control I (Oxazepam 100 ng/mL)
UCT0133	Benzodiazepine Calibrator #3, Cutoff A/Control II (Oxazepam 200 ng/mL)
UCT0134	Benzodiazepine Calibrator #4, Cutoff B/Control III (Oxazepam 300 ng/mL)
UCT0135	Benzodiazepine Calibrator #5 (Oxazepam 1000 ng/mL)
UCT0136	Benzodiazepine Control IV (Oxazepam 400 ng/mL)
UCT0142	Barbiturate Calibrator #2/Control I (Secobarbital 100 ng/mL)
UCT0143	Barbiturate Calibrator #3, Cutoff A/Control II (Secobarbital 200 ng/mL)
UCT0144	Barbiturate Calibrator #4, Cutoff B/Control III (Secobarbital 300 ng/mL)
UCT0145	Barbiturate Calibrator #5 (Secobarbital 1000 ng/mL)
UCT0146	Barbiturate Control IV (Secobarbital 400 ng/mL)
UCT0162	Ecstasy (MDMA) Low Cal. (Ecstasy 250 ng/mL)
UCT0163	Ecstasy (MDMA) Cutoff Cal. (Ecstasy 500 ng/mL)
UCT0164	Ecstasy (MDMA) Intermediate Cal. (Ecstasy 750 ng/mL)
UCT0165	Ecstasy (MDMA) High Cal. (Ecstasy 1000 ng/mL)
UCT0167	Ecstasy (MDMA) Control Level 1 (Ecstasy 375 ng/mL)
UCT0168	Ecstasy (MDMA) Control Level 2 (Ecstasy 625 ng/mL)
UCT0192	Methadone Metabolite (EDDP) Calibrator #2 (150 ng/mL)
UCT0193	Methadone Metabolite (EDDP) Calibrator #3, cutoff (300 ng/mL)
UCT0194	Methadone Metabolite (EDDP) Calibrator #4 (600 ng/mL)
UCT0195	Methadone Metabolite (EDDP) Calibrator #5 (1000 ng/mL)
UCT0197	Methadone Metabolite (EDDP) Control Level 1 (225 ng/mL)
UCT0198	Methadone Metabolite (EDDP) Control Level 2 (375 ng/mL)
UCT0223	Ethyl Alcohol Assay Calibrator #2 (100 mg/dL)
UCT0224	Ethyl Alcohol Assay Control Level 1 (50 mg/dL)
UCT0225	Ethyl Alcohol Assay Control Level 2 (300 mg/dL)
UCT0232	Cotinine Assay Low Cal./Control (250 ng/mL)
UCT0233	Cotinine Assay Cutoff Cal. (500 ng/mL)
UCT0234	Cotinine Assay Intermediate Cal. (250 ng/mL)
UCT0235	Cotinine Assay High Cal. (2000 ng/mL)
UCT0238	Cotinine Assay Control Level 2 (750 ng/mL)

Homogeneous Oral Fluid EIA

Catalog No.	Product Name
UCTOFC001	Sarstedt Collectors (100 pieces)
UCTS0000	Oral Fluid EIA Saliva Buffer
UCTS0001	Oral Fluid Negative Calibrator, 0ng/mL
UCTS0002	THC Recover Buffer
UCTS0010	Oral Fluid PCP EIA Kit (500 tests/kit)
UCTS0011	Oral Fluid PCP EIA Kit (5000 tests/kit)
UCTS0013	PCP Cutoff Calibrator, 5 ng/mL
UCTS0015	PCP High Calibrator, 25 ng/mL
UCTS0017	PCP Level 1 Control, 3 ng/mL
UCTS0018	PCP Level 2 Control, 10 ng/mL
UCTS0020	Oral Fluid Opiate EIA Kit (500 tests/kit)
UCTS0021	Oral Fluid Opiate EIA Kit (5000 tests/kit)
UCTS0023	Opiate Cutoff Calibrator, 20 ng/mL
UCTS0025	Opiate High Calibrator, 50 ng/mL
UCTS0027	Opiate Level 1 Control, 10 ng/mL
UCTS0028	Opiate Level 2 Control, 30 ng/mL
UCTS0030	Oral Fluid Cocaine Metabolite EIA Kit (500 tests/kit)
UCTS0031	Oral Fluid Cocaine Metabolite EIA Kit (5000 tests/kit)
UCTS0033	Cocaine Cutoff Calibrator, 10 ng/mL
UCTS0035	Cocaine High Calibrator, 50 ng/mL
UCTS0037	Cocaine Level 1 Control, 5 ng/mL
UCTS0038	Cocaine Level 2 Control, 20 ng/mL
UCTS0040	Oral Fluid Amphetamine EIA Kit (500 tests/kit)
UCTS0041	Oral Fluid Amphetamine EIA Kit (5000 tests/kit)
UCTS0043	Amphetamine Cutoff Calibrator, 25 ng/mL
UCTS0045	Amphetamine High Calibrator, 50 ng/mL
UCTS0047	Amphetamine Level 1 Control, 15 ng/mL
UCTS0048	Amphetamine Level 2 Control, 35 ng/mL
UCTS0050	Oral Fluid Methamphetamine EIA Kit (500 tests/kit)
UCTS0051	Oral Fluid Methamphetamine EIA Kit (5000 tests/kit)
UCTS0053	Methamphetamine Cutoff Calibrator, 25 ng/mL
UCTS0055	Methamphetamine High Calibrator, 50 ng/mL
UCTS0057	Methamphetamine Level 1 Control, 15 ng/mL
UCTS0058	Methamphetamine Level 2 Control, 35 ng/mL
UCTS0070	Oral Fluid THC EIA Kit (500 tests/kit)
UCTS0071	Oral Fluid THC EIA Kit (5000 tests/kit)
UCTS0073	THC Cutoff Calibrator, 10 ng/mL
UCTS0075	THC High Calibrator, 25 ng/mL
UCTS0077	THC Level 1 Control, 5 ng/mL
UCTS0078	THC Level 2 Control, 15 ng/mL
UCTS0110	Oral Fluid Methadone EIA Kit (500 tests/kit)
UCTS0111	Oral Fluid Methadone EIA Kit (5000 tests/kit)
UCTS0113	Methadone Cutoff Calibrator, 20 ng/mL
UCTS0115	Methadone High Calibrator, 50 ng/mL
UCTS0117	Methadone Level 1 Control, 10 ng/mL
UCTS0118	Methadone Level 2 Control, 30 ng/mL

Homogeneous Oral Fluid EIA

Catalog No.	Product Name
UCTS0120	Oral Fluid Propoxyphene EIA Kit (500 tests/kit)
UCTS0121	Oral Fluid Propoxyphene EIA Kit (5000 tests/kit)
UCTS0123	Propoxyphene Cutoff Calibrator, 20 ng/mL
UCTS0125	Propoxyphene High Calibrator, 50 ng/mL
UCTS0127	Propoxyphene Level 1 Control, 10 ng/mL
UCTS0128	Propoxyphene Level 2 Control, 30 ng/mL
UCTS0130	Oral Fluid Benzodiazepine EIA Kit (500 tests/kit)
UCTS0131	Oral Fluid Benzodiazepine EIA Kit (5000 tests/kit)
UCTS0133	Benzodiazepine Cutoff Calibrator, 20 ng/mL
UCTS0135	Benzodiazepine High Calibrator, 50 ng/mL
UCTS0137	Benzodiazepine Level 1 Control, 10 ng/mL
UCTS0138	Benzodiazepine Level 2 Control, 30 ng/mL
UCTS0140	Oral Fluid Barbiturate EIA Kit (500 tests/kit)
UCTS0141	Oral Fluid Barbiturate EIA Kit (5000 tests/kit)
UCTS0143	Barbiturate Cutoff Calibrator, 20 ng/mL
UCTS0145	Barbiturate High Calibrator, 50 ng/mL
UCTS0147	Barbiturate Level 1 Control, 10 ng/mL
UCTS0148	Barbiturate Level 2 Control, 30 ng/mL
UCTS0160	Oral Fluid Ecstasy (MDMA) EIA Kit (500 tests/kit)
UCTS0161	Oral Fluid Ecstasy (MDMA) EIA Kit (5000 tests/kit)
UCTS0163	Ecstasy (MDMA) Cutoff Calibrator, 25 ng/mL
UCTS0165	Ecstasy (MDMA) High Calibrator, 50 ng/mL
UCTS0167	Ecstasy (MDMA) Level 1 Control, 15 ng/mL
UCTS0168	Ecstasy (MDMA) Level 2 Control, 35 ng/mL
UCTS0190	Oral Fluid Methadone Metabolite (EDDP) EIA Kit (500 tests/kit)
UCTS0191	Oral Fluid Methadone Metabolite (EDDP) EIA Kit (5000 tests/kit)
UCTS0193	Methadone Metabolite (EDDP) Cutoff Calibrator, 20 ng/mL
UCTS0195	Methadone Metabolite (EDDP) High Calibrator, 50 ng/mL
UCTS0197	Methadone Metabolite (EDDP) Level 1 Control, 10 ng/mL
UCTS0198	Methadone Metabolite (EDDP) Level 2 Control, 30 ng/mL
UCTS0220	Oral Fluid Ethyl Alcohol Enzymatic Assay Kit (500 tests/kit)
UCTS0221	Oral Fluid Ethyl Alcohol Enzymatic Assay Kit (5000 tests/kit)
UCTS0223	Ethanol, Calibrator/Control, 50 mg/dL
UCTS0226	Ethanol, Calibrator/Control, 25 mg/dL
UCTS0230	Cotinine Assay, (500 tests/kit)
UCTS0231	Cotinine Assay, (5000 tests/kit)
UCTS0233	Cotinine Cutoff Calibrator, 75 ng/mL
UCTS0235	Cotinine High Calibrator, 75 ng/mL
UCTS0237	Cotinine Level 1 Control, 10 ng/mL
UCTS0238	Cotinine Level 2 Control, 50 ng/mL
UCTS0240	Oxycodone Assay (500 tests/kit)
UCTS0241	Oxycodone Assay, (5000 tests/kit)
UCTS0243	Oxycodone Cutoff Calibrator, 20 ng/mL
UCTS0245	Oxycodone High Calibrator, 50 ng/mL
UCTS0247	Oxycodone Level 1 Control, 10 ng/mL
UCTS0248	Oxycodone Level 2 Control, 30 ng/mL

Important Information for Oral Fluid Assays

Oral fluid sample preparation:

1. Collect saliva.
2. Centrifuge the sample, measure volume of sample.
3. Split the sample into 2 aliquots, label with ID number.
 - 3a. For all drugs except THC.**

Mix equal volumes of oral fluid and buffer for screening analysis.
 - 3b. Reserve undiluted portion for confirmation analysis.
4. **THC**
 - 4a. If a Starstedt collector was used, apply a volume of THC buffer equal to the sample volume to the pad.
 - 4b. Centrifuge and collect.
 - 4c. The sample is used without dilution.

Assay procedure:

1. Sample volume: 40 – 50 μL (use 45 μL).
2. R1 (antibody) reagent: 150 μL .
3. R2 (Enzyme) reagent: 75 μL .
4. Assay with the same parameters as urine testing.

Calibration:

1. Qualitative assay: use cutoff calibrator.
2. Semi-quantitative assay: use 3 calibrators and 2 controls.

The ANALETTE™

Versatile Random Access Chemistry Analyzer
From **PRECISION SYSTEMS™**



General

The ANALETTE is applicable for all the standard chemistry tests including: general and special chemistries, therapeutic drugs, drugs of abuse, proteins, profiles, etc., for which reagent systems have been developed.

Commonly specified tests are pre-programmed, and additional tests or substitute procedures are easily added.

The ANALETTE alarms when there is low volume in the sample or reagent container, and flags values outside the normal limits, as well as "panic" values.

The ANALETTE™

Rated highest testing rate per instrument cost!

- 30 wavelengths: 340 to 740 nm
- Concave holographic grating, diode array spectrophotometer
- Hemoglobin, lipemia, and bilirubin interference minimized^{1,2}
- Artificial blood interference minimized³
- Fast and flexible, one-hour walk-away
- Open chemistry system under PC control⁴
- Commonly specified tests pre-programmed
- Automatic level detection for samples and reagents
- Automatic dilution of the sample as required
- Automatic additional dilution and test re-run, if needed
- 42 or 72 specimens run with one loading
- STAT sample tested any time during a run
- Bar codes for accuracy, control and organization
- Built-in diagnostics
- Up to 32 reagents on board
- Up to 300 test per hour with ISE module

Based on technology developed by Precision Systems – the company that pioneered precision titrators, electronic lab calibrators traceable to NIST, and osmometers with thermoelectric cooling and non-interacting calibration.

Manufactured in the USA Patented and Pat. Pend.

References

1. Denney, J., Infrared Detection in Routine Clinical Chemistry Automation, © 1993
2. Denney, J., Why Does Traditional Chromatic Interference Correction Fail?. © 1996
3. Papp, R., et al, Effects of Two Different Blood Substitutes on Analytical Results Using Synermed® Reagents, Clinical Chemistry Program and Abstracts, June 1999, Vol. 45, No. S6, p. A2
4. Haden, B. and Heath, W.J., Clinical Evaluation of a Random Access Bench Top Chemistry Analyzer, Clinical Chemistry Program and Abstracts, July 2000, Vol. 46, No. 6, p.A151

The ANALETTE™

Specifications

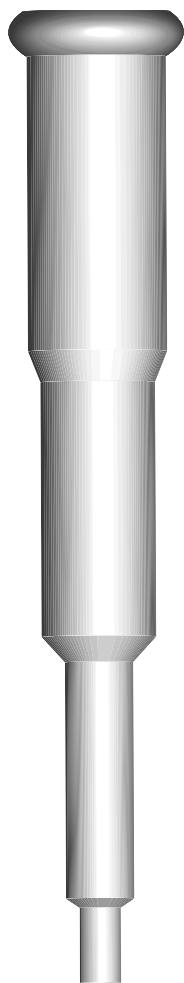
SAMPLE TYPES:	Aqueous, serum, plasma, urine, oral fluid
SIZES:	1 to 100 μ L in 0.05 μ L increments, 3 to 20 μ L typical
CONTAINERS:	0.5mL cups, 0.7mL tubes, or 13 x 75mm tubes
PREDILUTION:	Up to 1:150
STAT:	STAT samples any time; 2 STAT positions, more, if required
REAGENT TRAY CAPACITY:	24-28mL bottles, or 14-28mL bottles plus 5-200mL bottles, or up to 24-5mL and/ or 10mL bottles (with optional adapters) assorted with 28mL bottles plus 8 cups
PUMP CAPACITY:	170 μ L to 900 μ L in 0.5 μ L increments
PACKAGING:	5, 10, 25-28mL bottles, 1, 2, or 3 reagent per test
ASSAY TYPES:	Absorbance chemistries: endpoint, zero order and first order kinetics; Na, K, Cl with ISE module
CHEMISTRIES:	Open system. Up to 32 on board at a time; up to 150 can be held in memory
THROUGHPUT:	Up to 180 tests per hour / Up to 300 tests per hour with ISE module (2 or 3 reagent test are slower)
WALK-AWAY TIME:	Approximately 1 hour
SPECTROPHOTOMETER:	30 wavelengths from 340nm to 740nm, Band pass 10nm
OPTICAL CUVETTE:	14 curvettes per segment, up to 10 segments per ring for up to 140 tests; 7mm light path
BLANKS:	Serum and / or Reagents
DATA ENTRY:	Bar Code, sample ID, assay selection, panel selection and scheduling. Full keyboard may be used for sample demographics.
QUALITY CONTROL:	Using 3 control per assay, 60-day rolling FIFO Levey-Jennings
CALIBRATION:	1, 2, up to 6 cal points with curve fit, or by calibration factor
INSTRUMENT WARM-UP:	< 30 minutes from turn-on; 5-7 minutes from stand-by
TEMPERATURE:	37°C \pm 1°C temperature control of assay; probe preheats reagents; metal "bath" preheats curvettes
POWER SUPPLY:	Requires dedicated line of 115v \pm 15v60Hz or 150v \pm 12v60c or 230v \pm 25v50/60Hz (selected on Purchase Order)
WEIGHT:	80 pounds (37Kg) plus computer, monitor, keyboard and printer
DIMENSIONS:	12" (31cm) H X 27 ½" (70cm)W x 24" (61cm) D

Solid Phase Extraction Methods For Oral Fluid

CLEAN SCREEN®

DAU

column is copolymerized on a rigid, purified silica gel support. The two functional groups include a reverse phase, and an ion exchanger, benzenesulfonic acid. This column is commonly used for analyzing a wide range of drugs of abuse, including acidic, basic & neutral drugs.



THC IN ORAL FLUID FOR GC/MS ANALYSIS USING: 50 mg CLEAN SCREEN® DAU EXTRACTION COLUMN (Part # ZSDAU005)

- 1. PREPARE SAMPLE***
Add 100 - 500 µL of neat sample to a clean tube.
Add internal standard. Vortex and let sit for 10 minutes at room temperature.
Add 500 µL of glacial acetic acid.
Mix/vortex for 10 seconds.
- 2. CONDITION CLEAN SCREEN® EXTRACTION COLUMN**
1 x 200 µL CH₃OH.
1 x 200 µL D.I. H₂O.
1 x 200 µL 100 mM HCl.
- 3. APPLY SAMPLE**
Do not exceed 1 mL/minute.
- 4. WASH COLUMN**
1 x 500 µL D.I. H₂O.
1 x 500 µL 0.2 N HCl.
1 x 500 µL 100 mM HCl/Acetonitrile (70:30).
Dry column (1 minute at > 10 inches Hg).
- 5. ELUTION**
1 x 800 µL Ethyl Acetate/Hexane (25:75)
Do not exceed 1 mL/minute.
- 6. DRY ELUATE**
Evaporate at < 40 °C under a stream of N₂.
- 7. DERIVATIZE****
Add 25 µL BSTFA (with 1% TMCS), and 25 µL acetonitrile.
Overlay with N₂ and cap.
Vortex.
React 30 minutes at 70 °C.
- 8. QUANTITATE**
Inject 2 µL onto gas chromatograph.

* Sample is from either a neat sample capillary tube collection, or eluted off the cotton pad of a swab collection device with Oral Fluid THC buffer.

**Alternate derivatizations may be used.

Solid Phase Extraction Methods For Oral Fluid

AMPHETAMINES, OPIATES, & PHENCYCLIDINE IN ORAL FLUID FOR GC/MS ANALYSIS USING: 50 mg CLEAN SCREEN® DAU EXTRACTION COLUMN (Part # ZSDAU005)

1. PREPARE SAMPLE

Add 100 - 500 µL of neat sample to a clean tube.
Add internal standard(s) and let sit for 10 minutes at room temperature.
Add 800 µL of 100 mM phosphate buffer (pH 6.0).
Mix/vortex for 10 seconds. Sample pH should be 6.0 ± 0.5 .
Adjust pH accordingly with 100 mM monobasic or dibasic sodium phosphate.

2. CONDITION CLEAN SCREEN® EXTRACTION COLUMN

1 x 200 µL CH₃OH.
1 x 200 µL D.I. H₂O.
1 x 200 µL 100 mM phosphate buffer (pH 6.0).

3. APPLY SAMPLE

Do not exceed 1 mL/minute.

4. WASH COLUMN

1 x 500 µL D.I. H₂O.
1 x 500 µL 100 mM acetic acid.
1 x 500 µL CH₃OH.
Dry column (5 minutes at > 10 inches Hg).

5. ELUTION

1 x 800 µL CH₂Cl₂/IPA/NH₄OH (70:26:4).
Do not exceed 1 mL/minute.
NOTE: Prepare elution solvent daily.
Add IPA/NH₄OH, mix, then add CH₂Cl₂ (pH 11-12).

6. DRY ELUATE

For amphetamines and PCP, add 100 µL of 5% trifluoroacetic acid in methanol after 5 min. drying. (5 min drying removes ammonia, addition of acid ionizes volatile analytes preventing loss)
Evaporate to full dryness at < 40 °C under a stream of N₂.

7. DERIVATIZE

For Amphetamines*: Add 50 µL PFPA (PFAA).
Vortex. Overlay with N₂ and cap.
React 20 minutes at 70 °C.
Evaporate to dryness at < 40 °C.
Reconstitute with 50 µL acetonitrile.

For Opiates*: Add 200 µL of a 1:1 solution of propionic anhydride/pyridine. Make fresh daily.
Vortex.
React 60 minutes at 40 °C.
Evaporate to dryness at < 40 °C.
Reconstitute with 50 µL acetonitrile.

8. QUANTITATE

Inject 2 µL onto gas chromatograph.

*Alternate derivatizations may be used.
Phencyclidine does not derivatize.

COCAINE & BENZOYLECGONINE IN ORAL FLUID FOR GC/MS ANALYSIS USING: 50 mg CLEAN SCREEN® DAU EXTRACTION COLUMN (Part # ZSDAU005)

1. PREPARE SAMPLE

Add 100 - 500 µL of neat sample to a clean tube.
Add internal standard(s) and let sit for 10 minutes at room temperature.
Add 800 µL of 100 mM phosphate buffer (pH 6.0).
Mix/vortex for 10 seconds. Sample pH should be 6.0 ± 0.5 .
Adjust pH accordingly with 100 mM monobasic or dibasic sodium phosphate.

2. CONDITION CLEAN SCREEN® EXTRACTION COLUMN

1 x 200 µL CH₃OH.
1 x 200 µL D.I. H₂O.
1 x 200 µL 0.1 N HCl.

3. APPLY SAMPLE

Do not exceed 1 mL/minute.

4. WASH COLUMN

1 x 500 µL D.I. H₂O.
1 x 500 µL 0.1 N HCl acid.
1 x 500 µL CH₃OH/D.I. H₂O (50:50).
Dry column (5 minutes at > 10 inches Hg).

5. ELUTION

1 x 800 µL CH₂Cl₂/IPA/NH₄OH (70:26:4).
Do not exceed 1 mL/minute.
NOTE: Prepare elution solvent daily. Add IPA/NH₄OH, mix, then add CH₂Cl₂ (pH 11-12).

6. CONCENTRATE ELUATE

Evaporate at < 40 °C under a stream of N₂.

7. DERIVATIZE*

Fluoroalkylate: Add 100 µL PFPA (PFAA) or HFIP.
Overlay with N₂ and cap.
React 20 minutes at 70 °C.
Evaporate to dryness at < 40 °C.
Reconstitute with 50 µL acetonitrile.

TMS: Add 25 µL BSTFA (w. 1% TMCS) and 25 µL acetonitrile.
Overlay with N₂ and cap.
Mix/vortex
React 30 minutes at 70 °C.

8. QUANTITATE

Inject 2 µL onto gas chromatograph.
For MSD monitor the following ions:

*Alternate derivatizations may be used.

510(K) Certificates for Screening Reagents

K021887 – THC Enzyme Immunoassay

K020395 – Amphetamines Enzyme Immunoassay

K020763 – Cocaine Metabolite Enzyme Immunoassay

K020368 – Opiate Enzyme Immunoassay

K020254 – Phencyclidine Enzyme Immunoassay

K021449 – THC Calibrators and Controls

K020769 – Single Analyte (Amp, Cocaine, Opiate, PCP) Calibrators and Controls

K023316 – Single Analyte (Methadone, Propoxyphene) Calibrators and Controls

K023317 – Methadone Enzyme Immunoassay

K023795 – Propoxyphene Enzyme Immunoassay

K032365 – Benzodiazepine Enzyme Immunoassay, Calibrators and Controls

K031797 – Methadone Metabolite Enzyme Immunoassay, Calibrators and Controls

K032461 – Ethyl Alcohol Enzymatic Assay, Calibrators and Controls

K032764 – Barbiturate Enzyme Immunoassay, Calibrators and Controls

K033094 – Ecstasy Enzyme Immunoassay, Calibrators and Controls

K033866 – CAMP Multiple Analyte Enzyme Immunoassay

K033885 – BMBP Multiple Analyte Enzyme Immunoassay

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WEB: www.unitedchem.com

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2731 Bartram Road, Bristol, PA 19007

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Our prices are subject to change without notice. The price in effect when we receive your order will apply. All prices are in US Dollars and are F.O.B. Lewistown, PA 19007. Terms of payment are net 30 days.

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We welcome all orders; therefore, we do not have a minimum order requirement.

When ordering, please include your purchase order number, complete "Ship To" and "Bill to" address, catalog number, quantity, and description of product(s). Also include your name and phone number where we can contact you if we have any questions concerning your order.

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SPECIAL PRICING

We offer special pricing for volume purchases and standing orders. These discounts apply to bonded phase extraction column purchases only. Please call a sales representative for more information on special pricing qualifications.

RETURN POLICY

Our Quality Manager will handle all returns. Before returning merchandise, please call to obtain a return authorization number from the quality manager. We will need to know the reason for the return, date of purchase, purchase order number and invoice number in order to issue a return authorization number. Return merchandise must be received before a credit can be issued. Returns will not be accepted after 90 days. A restocking fee of 25% of products list price or a minimum of \$25.00 (which ever is greater) will be charged on all returns.

WARRANTY

All products manufactured by United Chemical Technologies, Inc. are guaranteed against defects in materials and workmanship for a period of 90 days after shipment. United Chemical Technologies, Inc. will replace any items that prove to be defective during this time period.

The exclusive remedy requires the end user to first advise United Chemical Technologies, Inc. of the defective product by phone or in writing. Secondly, the defective product must be returned within 30 days after proper approval from our Quality Manager. All returns must indicate the purchase order number, the lot number and the shipping date. United Chemical Technologies, Inc. total liability is limited to the replacement cost of UCT products.

This warranty does not apply to damage resulting from misuse.