

# A POLYMERIC COLUMN FOR THE EXTRACTION OF THC AND METABOLITES






## Product Benefits

- Simple one-step extraction elutes all three (3) THC analytes (THC- $\Delta$ -9, THC-hydroxy metabolite and THC-carboxy metabolite)
- Enhanced dual mechanism to accommodate hydrophobic character of the THC parent and metabolites
- 10-20  $\mu$ m particle size and minimum bed volume for consistent flow through column
- Column conditioning is not required
- Highly reproducible extraction

## STYRE SCREEN® THC

**Application:** Polymeric bead for the extraction of THC and THC metabolites (THC-delta-9, THC-hydroxy metabolite and THC-carboxy metabolite)

**Structure:** Polymeric Bead  + Proprietary

COLUMNS			
Tube Volume (mL)	Sorbent Amount (mg)	Units per Pack	Part Number
1	30	100	SSTHC031
3	60	50	SSTHC063
6	60	50	SSTHC066
10	60	50	SSTHC06Z
6	100	50	SSTHC116
10	100	50	SSTHC11Z

## Method for the Extraction of THC- $\Delta$ -9, THC-Hydroxy Metabolite and THC-Carboxy Metabolite from Whole Blood

### Part #

SSTHC116 – STYRE SCREEN® THC 100 mg, 6 mL Tube

SLDA100ID21 – 5UM – SELECTRA® DA HPLC Column 100 x 2.1mm, 5  $\mu$ m

#### 1. PREPARE SAMPLE:

To 1-2 mL whole blood add appropriate internal standards prepared in alcohol  
 Add drop-wise 2.5 mL Ice Cold acetonitrile  
 Mix thoroughly and centrifuge  
 Decant acetonitrile into a clean tube.  
 Evaporate acetonitrile under a stream of air or nitrogen to ~ 200  $\mu$ L  
 Add 2 mL D.I. H<sub>2</sub>O (pH of H<sub>2</sub>O must be ~ 6.0-7.0)

#### 2. APPLY SAMPLE:

Load at 1 to 2 mL/minute.

#### 4. WASH COLUMN:

Wash with 2 mL (84: 15: 1) D.I. H<sub>2</sub>O: Acetonitrile: NH<sub>4</sub>OH (made fresh daily) Dry column under full vacuum or pressure for 10-15 minutes

#### 5. ELUTE THC & metabolites:

1 x 3 mL Hexane/ Ethyl Acetate/ Glacial Acetic Acid (49: 49:2) Collect at 1-2 mL/ minute.

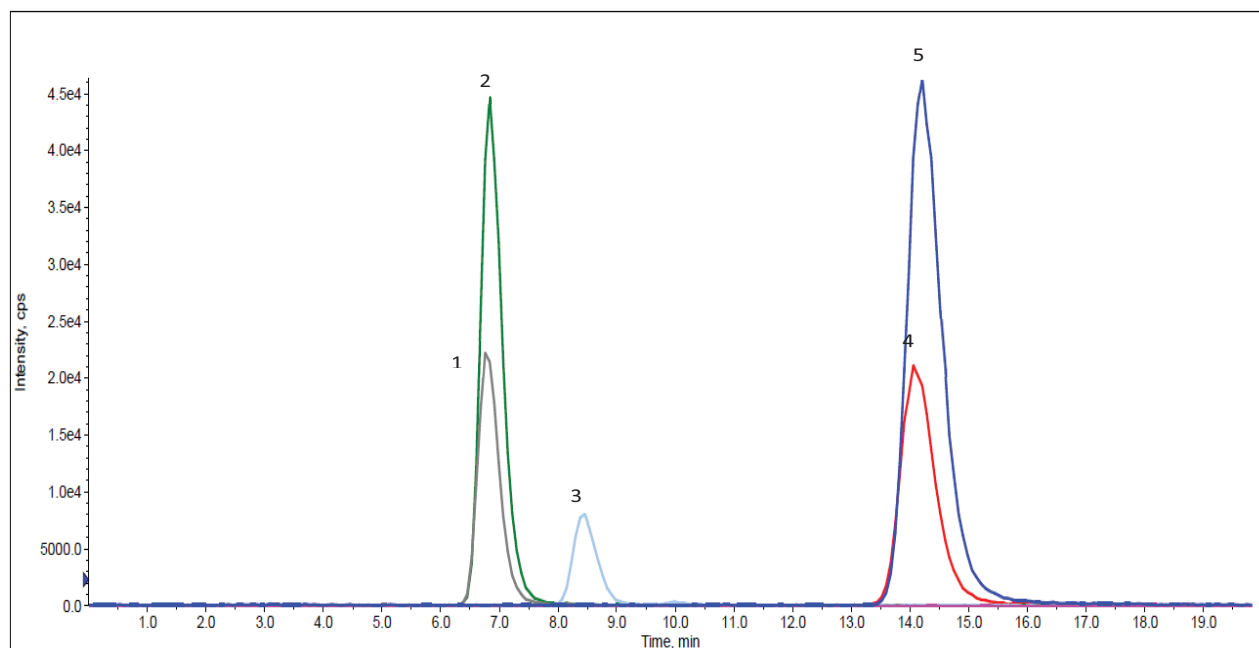
#### 6. DRY ELUATE:

Evaporate to dryness at < 40° C.

#### 7. RECONSTITUTE / DERIVATIZE:

- LC-MS/MS: Reconstitute sample in 100  $\mu$ L of mobile phase Inject 5  $\mu$ L.

# Ion Chromatograms of THC- $\Delta$ -9, THC-Hydroxy Metabolite and THC-Carboxy Metabolite



Analyte	MRM Transitions		Relative Retention Time (minutes)
	Q1	Q3	
1. HYDROXY DELTA 9-THC D <sub>3</sub>	334.0	316.2	6.80
2. HYDROXY DELTA 9-THC	330.9	313.2	6.88
3. CARBOXY DELTA 9-THC	334.0	316.2	8.47
CARBOXY DELTA 9-THC D <sub>3</sub>	348.3	303.0	-
4. DELTA 9-THC D <sub>3</sub>	318.2	196.2	14.20
5. DELTA 9-THC	315.2	196.2	14.31

## PARAMETERS

**Instrument:** API 4000 Qtrap MS/MS with Agilent 1200 Binary Pump SL

**HPLC Column:** SELECTRA® DA HPLC Column 100 x 2.1mm, 5 µm

**Polarity:** Negative/ Positive

**Injection Volume:** 5 µL

**Flow Rate:** 0.5 mL/minute

**Reconstitute:** 100 µL

**Mobile Phase A:** 0.1% formic acid D.I. H<sub>2</sub>O

**Mobile Phase B:** 0.1% formic acid in MeOH

**Gradient:**

Time	%A	%B
0.00	25	75
20.00	STOP	

## PRICES AND TERMS

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 17044. Terms of payment are net 30 days.

## MINIMUM ORDERS

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 a phone number where you can be reached should we have any questions concerning your order.

## SHIPMENTS

Normal processing is within 24 hours after receipt of an order. Unless special shipping requests have been made, our trained staff will send all orders by UPS Ground service. The appropriate shipping charges (freight & insurance costs) will be added to the invoice, unless otherwise instructed by the customer.

## 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 the price paid, or a minimum of \$25.00 (whichever is greater) will be charged on all returns.

## WARRANTY

All products manufactured by UCT are guaranteed against defects in materials and workmanship for a period of 90 days after shipment. UCT will replace any items that prove to be defective during this time period. The exclusive remedy requires the end user to first advise UCT of the defective product by phone or in writing and must include order number, the lot number and the shipping date.

To initiate this action, photographs of the product, including packaging and labeling of the containers, must be submitted to the UCT Representative for approval. With approval a return authorization can be initiated, and must be received within 30 days. Once the materials arrive at UCT a further inspection of the materials must be completed and accepted by our Quality Manager prior to further action of credits or replacement. UCT's total liability is limited to the replacement cost of UCT products.

This warranty does not apply to damage resulting from misuse.

## Contact Us

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