

THC From Oral Fluids For GC/MS Analysis Using: 200 mg Clean Screen® DAU Extraction Column



UCT Part Numbers

ZSDAU020-D
Clean Screen® DAU
10 mL, 200 mg sorbent
Without Tips

Procedure:

1. Prepare Sample

- To 1 mL of oral fluid specimen add 50 ng/mL internal standard (THCA D-9) and let sit for 10 minutes at room temperature.
- Vortex for 10 seconds.
- Add 0.5 mL of glacial acetic acid and vortex for 10 seconds.

2. Condition Clean Screen® DAU Extraction Column

- Wash with 3 mL MeOH.
- Wash with 3 mL D.I. H₂O.
- Wash with 1 mL of 0.1 N HCl.

3. Apply Sample

- Pour sample into extraction column and pull through.
- Do not exceed 1 mL/min.

4. Wash Column

- Wash with 2 mL DI H₂O.
- Wash with 2 mL of 70/30 (0.1 N HCl/Acetonitrile).
- Dry with vacuum for 5 minutes or until dry.
- Add 200 µL of Hexane.

5. Elution

- 2 mL of Hexane/Ethyl Acetate (50/50) Do not exceed.
- 1 mL/min.

6. Dry Eluate

- Dry under a stream of nitrogen at < 40°C.

7. Derivatize

- Add 50 µL MSTFA.
- Vortex for 10 seconds.
- Heat for 20 minutes at 60°C.
- Vortex for 10 seconds while hot.
- Reconstitute in 50 µL of Ethyl Acetate.

8. Quantitate

- Inject 2 µL onto gas chromatograph.

The Oral Fluid THC ions monitored are the following on Agilent 5973

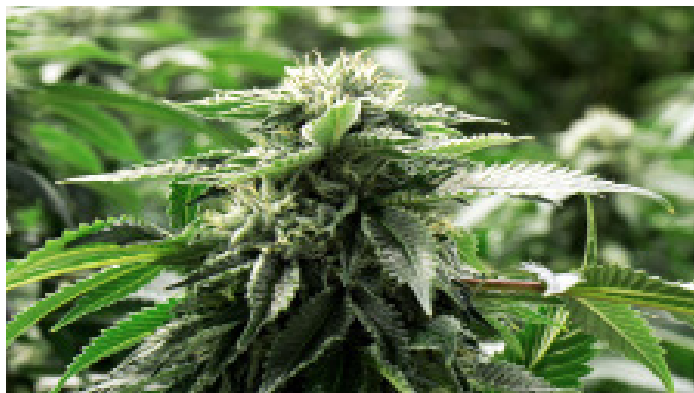
Analyte	Primary Ion	Secondary	Tertiary	Cerilliant #
THCA-TMS	371(Q)	386	387	T-005
THCA D9-TMS (Internal Standard)	380(Q)	479		T-019

Contributed by:

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THC In Oral Fluid For GC/MS Analysis Using: 50 mg Clean Screen® DAU Extraction Column



UCT Part Numbers

ZSDAU005
Clean Screen® DAU
50 mg, 10 mL

Procedure:

1. Prepare Sample

- Add 100 - 500 µL of neat oral fluid 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 ethyl acetate.
 - Overlay with N₂ and cap.
 - Vortex.
 - React 30 minutes at 70°C.
 - Remove from heat and allow to cool.
- Note:** Do not evaporate BSTFA solution

8. Quantitate

- Inject 2 µL onto gas chromatograph.

Analyte	Primary Ion	Secondary	Tertiary	Cerilliant #
THC-TMS	371	386	303	T-005
THC-D3-TMS	374	389	318	T-003

* 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.

