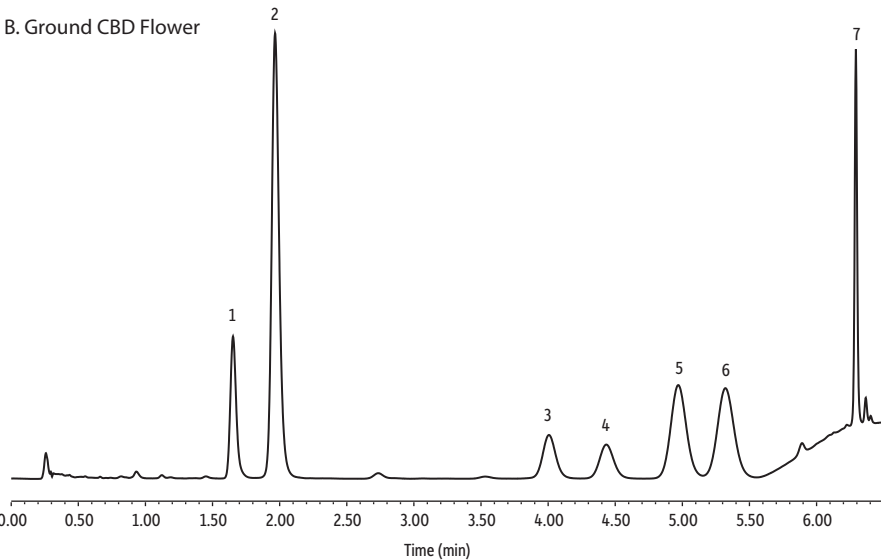
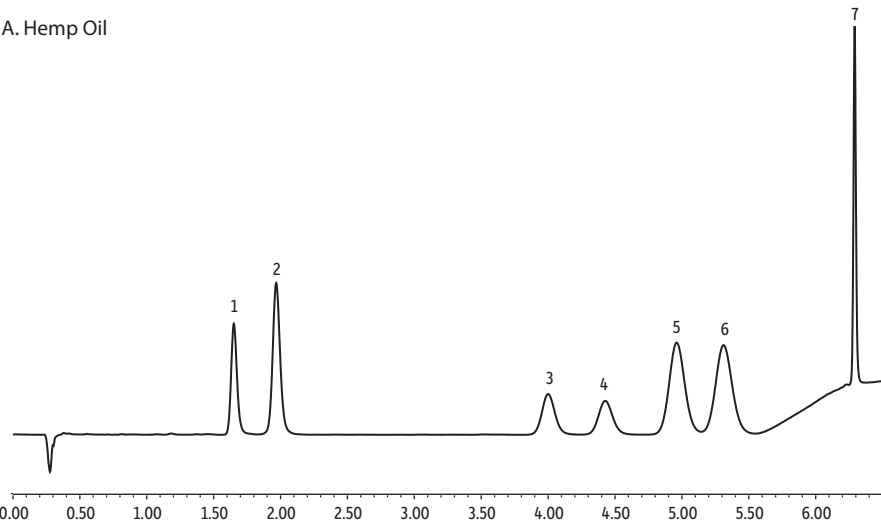


Potency Method for 7 Cannabinoids in Matrix on 50 x 3 mm, 2.7 µm Raptor ARC-18



LC_FF0614

Peaks	ta (min)
1. Cannabidiol (CBD)	1.651
2. Cannabidiolic acid (CBDA)	1.967
3. Δ9-Tetrahydrocannabinol (Δ9-THC)	4.000
4. Δ8-Tetrahydrocannabinol (Δ8-THC)	4.426
5. (6aR,9S)-delta-10-Tetrahydrocannabinol ((6aR,9S)-Δ-10-THC)	4.961
6. (6aR,9R)-delta-10-Tetrahydrocannabinol ((6aR,9R)-Δ-10-THC)	5.312
7. δ-9-Tetrahydrocannabinolic acid-a (THCA-A)	6.203

Column	Raptor ARC-18 (cat.# 9314A5E)
Dimensions:	50 mm x 3.0 mm ID
Particle Size:	2.7 µm
Pore Size:	90 Å
Guard Column:	Raptor ARC-18 EXP guard column cartridge 5 mm, 3.0 mm ID, 2.7 µm (cat.# 9314A0253)
Temp.:	30 °C
Standard/Sample	Cannabidiol (CBD) (cat.# 34011) Cannabidiolic acid (CBDA) (cat.# 34094) d9-Tetrahydrocannabinol (d9-THC) (cat.# 34067) d8-Tetrahydrocannabinol (d8-THC) (cat.# 34090) d9-Tetrahydrocannabinolic acid A (THCA-A) (cat.# 34111) Compounds not present in these mixes were obtained separately.
Diluent:	25:75 Water:acetonitrile
Conc.:	50 ppm
Inj. Vol.:	3 µL

Mobile Phase	
A:	Water, 5 mM ammonium formate, 0.1% formic acid
B:	Methanol, 0.1% formic acid

Time (min)	Flow (mL/min)	%A	%B
0.00	0.8	25	75
5.00	0.8	25	75
5.50	0.8	5	95
6.50	0.8	5	95
6.51	0.8	25	75
8.00	0.8	25	75

Detector	UV/Vis @ 228 nm
Flow Cell Size:	500 nL
Instrument	Waters ACQUITY UPLC H-Class
Sample Preparation	A. Hemp oil was prepared by aliquoting 50 µL of oil and adding 950 µL of acetonitrile. After vortexing for 30 seconds, 750 µL were transferred to a vial and 250 µL of water were added. The sample was vortexed, a 20-fold dilution was performed, and analytes were spiked at 50 ppm.

B. Ground CBD flower was prepared by weighing 500 mg in a centrifuge tube and extracting with 10 mL of 80:20 methanol:water. Samples were vortexed for 15 seconds and sonicated for 5 minutes (3 cycles) and then centrifuged at 4000 rpm for 5 minutes. Supernatant was diluted 50-fold and all analytes were spiked at 50 ppm, except CBDA which was measured at endogenous levels.

All samples were prepared in a 2 mL vial (cat.# 21142) and capped with a short screw cap (cat.# 24498).