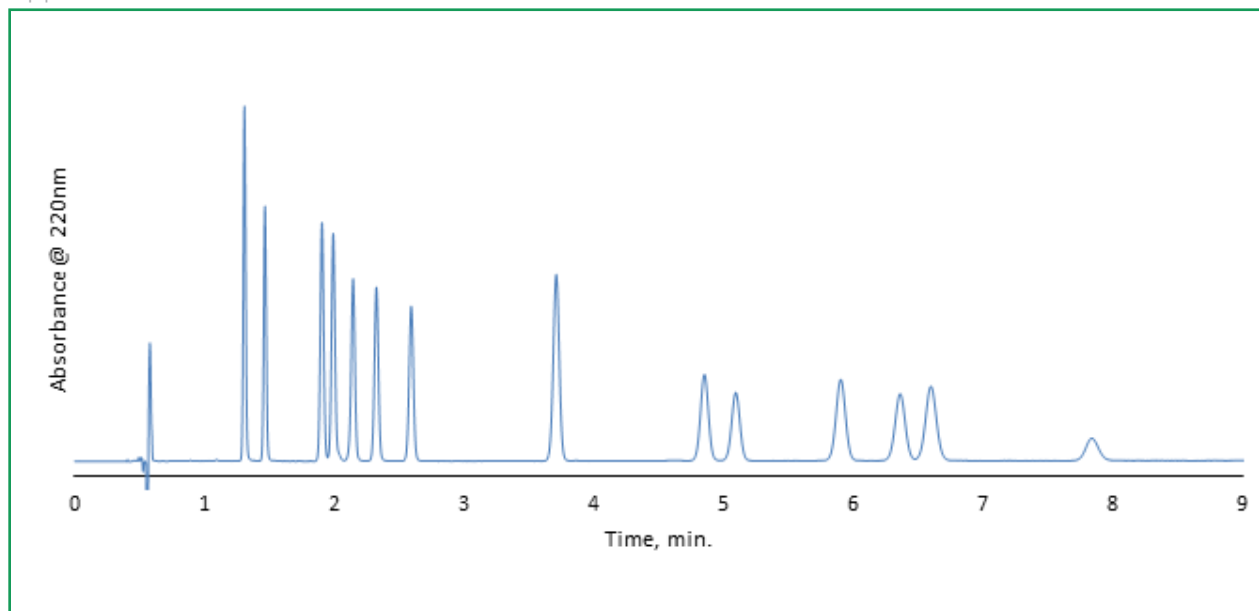




## Isocratic Separation of 14 Cannabinoids on HALO® C18

Application Note 165-CN



### TEST CONDITIONS:

**Column:** HALO 90 Å C18, 2.7  $\mu\text{m}$ ,  
3.0 x 150 mm  
**Part Number:** 92813-702  
**Mobile Phase:**  
A: Water/0.1% formic acid  
B: Acetonitrile/0.085% formic acid  
**Isocratic:** 75% B  
**Flow Rate:** 1.0 mL/min  
**Initial Pressure:** 350 bar  
**Temperature:** 30 °C  
**Detection:** UV 220 nm, PDA  
**Injection Volume:** 0.6  $\mu\text{L}$   
**Dwell Volume:** 0.471 mL  
**Sample Solvent:** 75/25 methanol/water  
**Response Time:** 0.025 sec  
**Data Rate:** 100 Hz  
**Flow Cell:** 1.0  $\mu\text{L}$   
**LC System:** Shimadzu Nexera X2

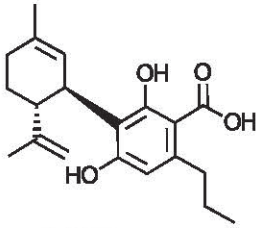
### PEAK IDENTITIES:

1. Cannabidivarinic acid (CBDVA)
2. Cannabidvarin (CBDV)
3. Cannabidiolic acid (CBDA)
4. Cannabigerolic acid (CBGA)
5. Cannabigerol (CBG)
6. Cannabidiol (CBD)
7. Tetrahydrocannabivarin (THCV)
8. Cannabinol (CBN)
9. delta-9- Tetrahydrocannabinol ( $\Delta^9$ -THC)
10. delta-8-Tetrahydrocannabinol ( $\Delta^8$ -THC)
11. Cannabicyclol (CBL)
12. Cannabichromene (CBC)
13. delta-9-Tetrahydrocannabinolic acid A (THCA)
14. Cannabichromenic acid (CBCA)

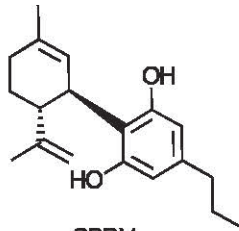




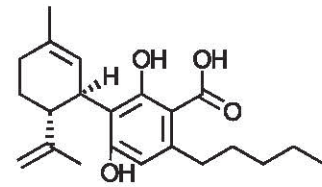
### STRUCTURES:



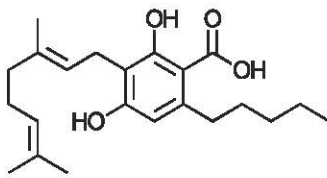
CBDVA



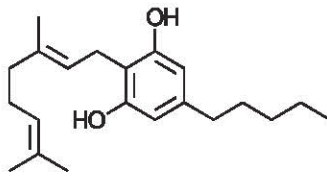
CBDV



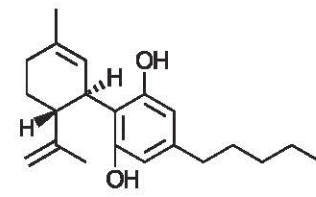
CBDA



CBGA



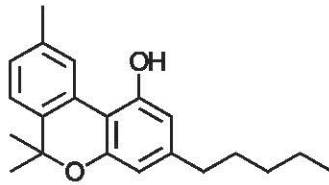
CBG



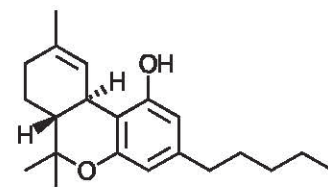
CBD



THCV



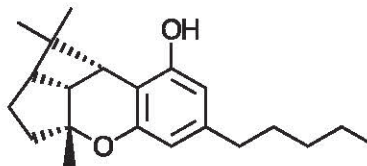
CBN



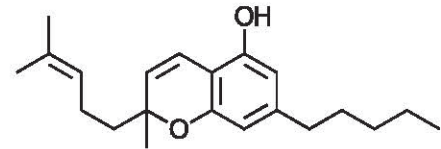
Δ9-THC



Δ8-THC



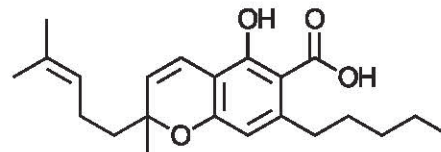
CBL



CBC



THCA



CBCA

