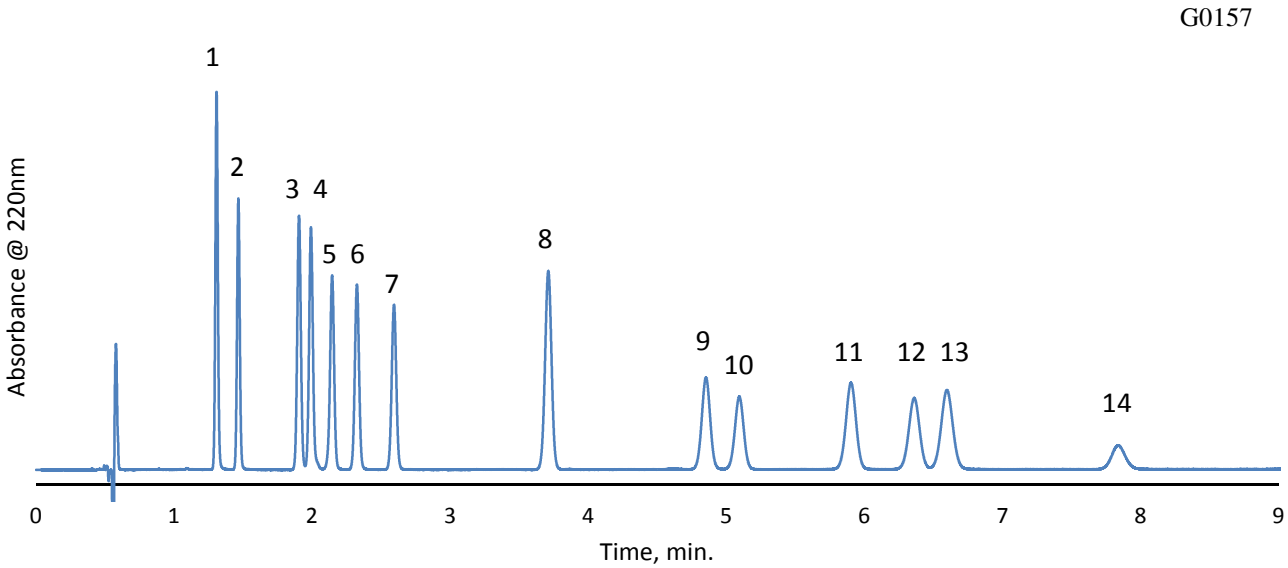
Application Note: 165-CN

Isocratic Separation of 14 Cannabinoids on HALO C18



TEST CONDITIONS:

Column: HALO 90Å, C18, 2.7 µm, 3.0 x 150mm
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 µL
Dwell Volume: 0.471 mL
Sample Solvent: 75/25 methanol/ water
Response Time: 0.025 sec.
Data Rate: 100 Hz
LC System: Shimadzu Nexera X2
Flow Cell: 1 µL

A HALO C18 column is used to separate a mixture of fourteen cannabinoids, showing fast results and high resolution within critical pairs. Cannabinoids are a class of chemical compounds primarily found in the marijuana plant. Many of these compounds have been found to provide medicinal benefits such as reduction in pain and inflammation.

PEAK IDENTITIES:

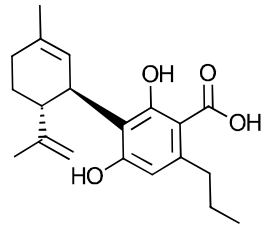
1. Cannabidivarinic acid (CBDVA)
2. Cannabidvarin (CBDV)
3. Cannabidiolic acid (CBDA)
4. Cannabigerolic acid (CBGA)
5. Cannabigerol (CBG)
6. Cannabidiol (CBD)
7. Tetrahydrocannabivarin (THCV)
8. Cannabinol (CBN)
9. delta-9- Tetrahydrocannabinol (Δ9-THC)
10. delta-8-Tetrahydrocannabinol (Δ8-THC)
11. Cannabicyclol (CBL)
12. Cannabichromene (CBC)
13. delta-9-Tetrahydrocannabinolic acid A (THCA)
14. Cannabichromenic acid (CBCA)

STRUCTURES ON PAGE 2

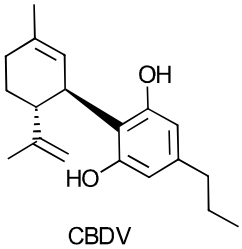
FOR MORE INFORMATION OR TO PLACE AN ORDER, CONTACT:

Application Note: 165-CN

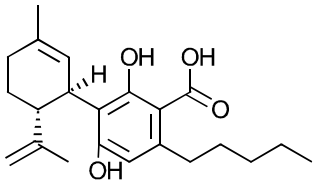
Cannabinoid Structures



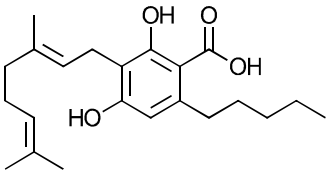
CBDVA



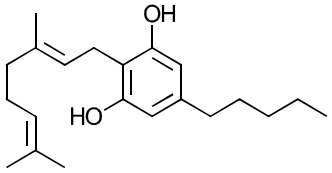
CBDV



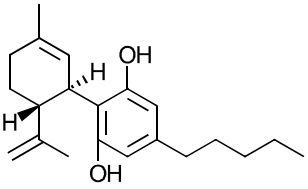
CBDA



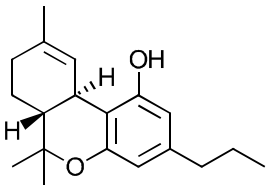
CBGA



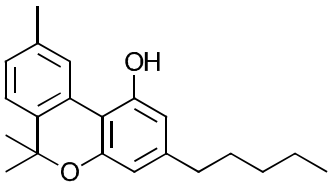
CBG



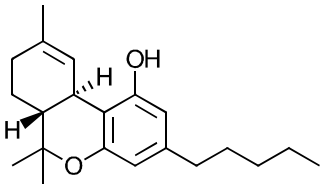
CBD



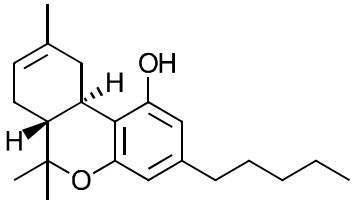
THCV



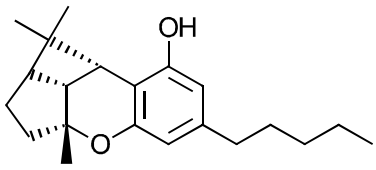
CBN



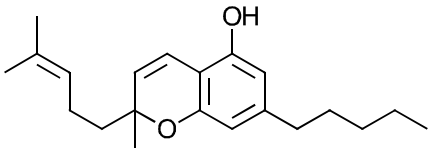
Δ 9-THC



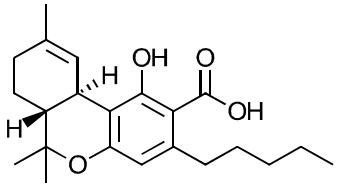
Δ 8-THC



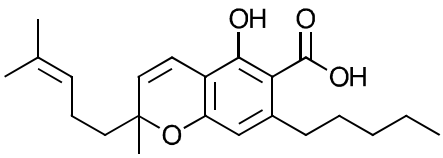
CBL



CBC



THCA



CBCA