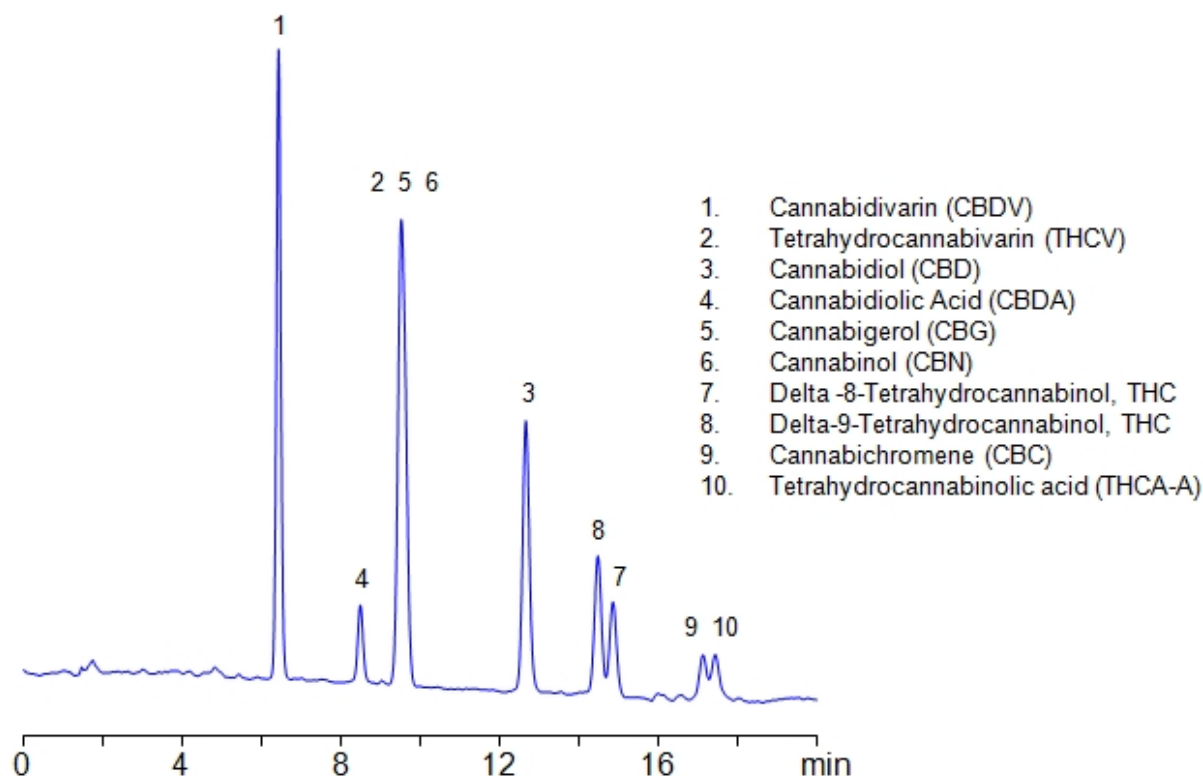


HPLC Separation of Ten Cannabinoids on Cannsep C Column

<https://sielc.com/hplc-separation-of-ten-cannabinoids-on-cannsep-c-column>

Chromatogram



Column: Cannsep C
Column size: 4.6 × 150 mm, 5 µm
Mobile phase: Gradient MeCN 60-80% in 20 min,
Buffer: H₂SO₄ - 0.1 %
UV detection: 210 nm

Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of Tetrahydrocannabinol (THC) , Delta-9-Tetrahydrocannabinol (THC) , Tetrahydrocannabinolic acid (THCA-A) , Tetrahydrocannabivarin (THCV) , Cannabidiol (CBD) , Cannabinol (CBN) , Cannabichromene (CBC) , Cannabidivarin (CBDV) , Cannabigerol (CBG) , Cannabidiolic acid (CBDA) .

Cannabidivarin (CBDV) is a non-intoxicating psychoactive cannabinoid with the chemical formula C₁₉ H₂₆ O₂ . Due to it demonstrating anticonvulsive properties, it is actively in Phase-2 trials for adult epilepsy, childhood epilepsy, and for Prader-Willi Syndrome.

Tetrahydrocannabivarin (THCV , THV) is a cannabinoid receptor type 1 antagonist with the chemical formula C₁₉ H₂₆ O₂ . It is prevalent in certain strains of Cannabis in central Asia and southern Africa. It is currently being researched as a potential treatment for obesity-associated glucose intolerances. It is also said to reduce appetite and have energizing effects.

Cannabidiol (CBD) is a phytocannabinoid with the chemical formula C₂₁ H₃₀ O₂ . It is used in a variety of ways. It's only confirmed medical use is as epilepsy medication. It may help with pain, sleep, and addiction as an alternative to opioids, but due to limited clinical evidence, it's regulations are dependent on the state. It is advised against using it during pregnancy due to unknown effects on fetal and infant development.

Cannabidiolic Acid (CBDA) is a precursor to Cannabidiol with the chemical formula C₂₂ H₃₀ O₄ . Research suggests that it might have anti-inflammatory, anti-emetic, anti-convulsant, and anti-carcinogenic properties, but not enough research has been done into it for it to be used as widely as other cannabinoids and the like.

Cannabigerol (CBG) is a non-psychoactive cannabinoid with the chemical formula C₂₁ H₃₂ O₂ . It is a minor constituent of cannabis. CBG that is derived from marijuana is illegal, while CBG derived from hemp is legal as long as the THC content of hemp is less than 0.3% of dry weight. It was sold illegally by certain companies under unproven claims of being treatment against the COVID-19 virus and inflammation.

Cannabinol (CBN) is a mildly psychoactive phytocannabinoid with the chemical formula C₂₁ H₂₆ O₂ . It was the first cannabinoid to be isolated from cannabis in the late 1800s. It is legal in the United States as long as the THC concentration is 0.3% or less.

Method Parameters

Mobile Phase	Gradient MeCN 60-80% , 20 min
Buffer	H ₂ SO ₄ – 0.1%
Flow Rate	1.0 ml/min
Detection	UV, 210 nm
Class of Compounds	Drug, Hydrophilic, Ionizable, Supplements
Analyzing Compounds	Tetrahydrocannabinol (THC),Delta-9-Tetrahydrocannabinol (THC),Tetrahydrocannabinolic acid (THCA-A),Tetrahydrocannabivarin (THCV),Cannabidiol (CBD),Cannabinol (CBN),Cannabichromene (CBC),Cannabidivarin (CBDV),Cannabigerol (CBG),Cannabidiolic acid (CBDA)

HPLC Column Used

Cannsep C, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

[Order this column at hplc-shop.de →](http://www.hplc-shop.de)