

AGILENT 1220 INFINITY II HPLC SYSTEM FOR CANNABINOID POTENCY TESTING

APPLICATION OVERVIEW



Agilent 1220 Infinity II

Introduction

The Agilent 1220 Infinity II HPLC system offers reliable and robust profiling and quantification tool for eleven of the most commonly targeted cannabinoids found in marijuana (*Cannabis Sativa*) and products such as edible foodstuffs derived from the plant material. The method defines the analytical column, mobile phase modifiers and full system parameters to separate the cannabinoids in under 5 minutes with baseline resolution of 1.86 for the critical pair.

Target Cannabinoids
Cannabidivarin (CBDV)
Tetrahydrocannabivarin (THCV)
Δ^9-tetrahydrocannabinol (THC)
Δ^8-tetrahydrocannabinol (THC)
Cannabidiol (CBD)
Cannabigerol (CBG)
Tetrahydrocannabinolic acid (THCA)
Cannabidiolic Acid (CBDA)
Cannabinol (CBN)
Cannabigerolic acid (CBGA)
Cannabichromene (CBC)

Full method parameters are included to separate the above eleven cannabinoids.

Agilent offer solutions, proven over many years, to assess the potency and safety of botanical commodities.

- Certify the identity of a commodity and ensure accurately labeled.
- Assess cannabis quality, and efficacy.
- Choose from our broad portfolio of testing solutions for both medicinal and recreational cannabis.
- Buy or lease the best analytical equipment.
- Move ahead with our method development and consulting services

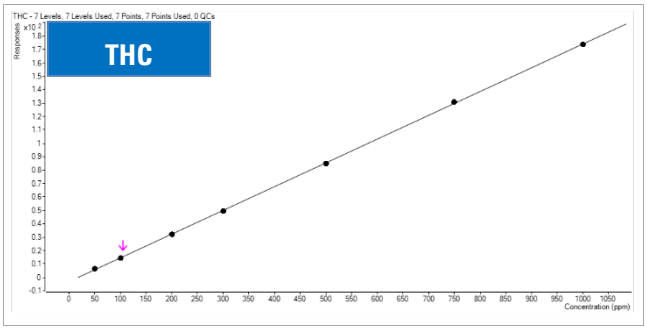
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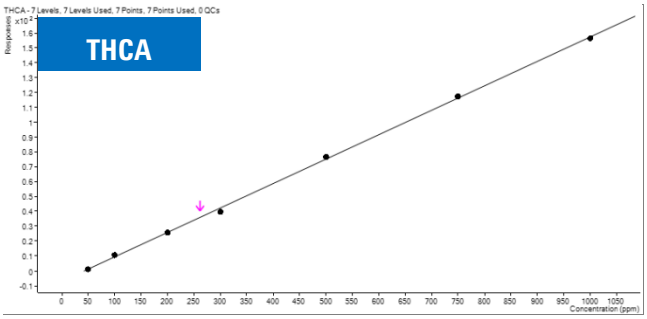
The Agilent 1220 Infinity II for cannabinoid potency testing configuration:

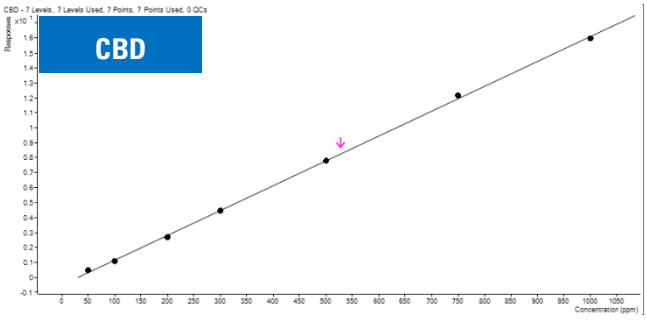
Solution	Part Number
1220 Infinity II LC Gradient System o Includes gradient pump (max. pressure 600 bar) with integrated degassing unit, auto sampler, column oven and variable wavelength detector and standard flow cell.	G4290B
OpenLAB 2.2 data acquisition, analysis and reporting software	M8413AA
Poroshell Bonus RP 3.0 mm x 50 mm, 2.7 um particle size	699968-301
Ammonium formate and formic acid mobile phase modifiers	G1946-85021 G2453-85060
Technical brief with detailed method parameters	

Contact your Agilent representative for a quote.

Acronym	r^2
CBDV	0.9997
THCV	0.9992
CBC	0.9998
CBG	0.9997
CBN	0.9999
CBD	0.9995
CBDA	0.9999
Δ9-THC	0.9999
CBGA	0.9998







Approximately 90% of the total THC in fresh marijuana plant material occurs as THCA[1]. Therefore, it is often desired to measure the total THC content of *C. sativa*: Total THC = THC + 0.877 x (THCA). The Agilent 1220 Infinity II for cannabinoid potency testing, easily measures total THC content and provides a qualitative and quantitative profile of all the targeted cannabinoids for potency, and efficacy determinations.

For more information: Contact your local Agilent representative or visit:
www.agilent.com/chem/cannabis

Agilent products and solutions are intended to be used for cannabis quality control and safety testing in laboratories where such use is permitted under applicable state law.

This information is subject to change without notice.

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