

Confidently Test the Potency of Cannabis Products

From extracts to final derived cannabis products, Agilent columns and supplies can help you effectively perform key cannabis testing applications.

Cannabis and hemp potency testing

Regions that have legalized medicinal or recreational marijuana use typically require cannabinoid quantitation for total tetrahydrocannabinol (THC) and cannabidiol (CBD). The most common analytical procedure to identify and quantify cannabinoids is high performance liquid chromatography (HPLC) with ultraviolet (UV) detectors. Agilent's HPLC-based Potency Consumables Kit contains HPLC columns and enough sample preparation supplies needed to analyze 400 cannabis flower and hemp samples.

This guide includes links for the various kits as well as the recommended columns and supplies within each kit for the different analysis.

These products can be used to run the methods described in the following application notes and e-Methods:

- [5991-9285EN](#) Dedicated Cannabinoid Potency Testing Using the Agilent 1220 Infinity II LC System (available as e-Method G5277#010 or [M5650AA](#))
- [5994-0912EN](#) Quantification of Cannabinoids in Industrial Hemp Using the Agilent 1220 Infinity II LC System (available as e-Method G5277#020 or [M5651AA](#))

Agilent e-Methods are designed to accelerate your startup time by condensing the vast amounts of technical information and optimized analytical methods into a ready-to-run, downloadable, digital information package.

This guide provides a list of all the columns and supplies required to run the e-Methods associated with the application notes. The M#####AAA methods can be purchased online, while the corresponding G##### can be purchased through your local sales and distribution channel.

Utilize the *MyList* links to add items under each category to your *Favorite Products* page in the [Agilent online store](#).

Then, enter the quantities for the products you need. Your list will remain under your *Favorite Products* for future orders.

If this is your first time using the *Favorite products* page, you will be asked to enter your email address for account verification. If you have an existing Agilent account, you will be able to log in. However, if you don't have a registered Agilent account, you will need to register for one. This feature is valid only in regions that are e-commerce enabled. All items can also be ordered through your regular sales and distributor channels.

Agilent cannabis and hemp potency testing



Sample Preparation and Sample Containment

View [MyList](#) for the items in the table below:

| Description | Part Number |
|---|-------------|
| Captiva premium syringe filter, regenerated cellulose (RC) membrane, 4 mm diameter, 0.45 µm pore size, 100/pk | 5190-5107 |
| Captiva disposable syringe, 5 mL, 100/pk | 9301-6476 |
| Ceramic homogenizers for 50 mL tubes, 100/pk | 5982-9313 |
| Centrifuge tubes, 50 mL, 25/pk | 5610-2049 |
| Cap, screw, green, PTFE/red silicone septa, 100/pk | 5182-0718 |
| Vial, screw top, amber, write-on spot, deactivated (silanized), certified, 2 mL, 100/pk | 5183-2072 |
| Vial insert, 250 µL, deactivated glass with polymer feet, 100/pk | 5181-8872 |

Potency Standards

View [MyList](#) for the items in the table below:

| Description | Part Number |
|---|-------------|
| Cannabinoid Mix A - CBD, CBN, delta9-THC | 5190-9430 |
| Cannabinoid Mix B - THCA, CBDA, CBG | 5190-9429 |
| Cannabinoid Mix C - CBDV, CBGA, CBC | 5190-9428 |
| Cannabinoid Mix D - THCV, delta8-THC | 5190-9427 |
| Cannabidivarin (CBDV) | 5191-3920 |
| Tetrahydrocannabinol (delta8-THC) | 5191-3921 |
| delta8-Tetrahydrocannabinol (delta8-THC) | 5191-3922 |
| Cannabigerol (CBG) | 5191-3923 |
| Cannabidiol (CBD) | 5191-3924 |
| delta9-Tetrahydrocannabinolic acid (THCA) | 5191-3925 |
| Cannabinol (CBN) | 5191-3926 |
| Cannabigerol acid (CBGA) | 5191-3927 |
| Cannabichromene (CBC) | 5191-3928 |
| delta9-Tetrahydrocannabinol (delta9-THC) | 5191-3929 |
| Cannabidiolic acid (CBDA) | 5191-3930 |

GC Columns and Supplies

View [MyList](#) for the items in the table below:

| Description | Part Number |
|---|-------------|
| InfinityLab Poroshell 120 EC-C18, 3.0 x 50 mm, 2.7 µm, LC column | 699975-302 |
| InfinityLab Poroshell 120 EC-C18, 3.0 mm, 2.7 µm, UHPLC guard, 3/pk | 823750-911 |
| Formic acid, 5 mL | G2453-85060 |
| InfinityLab Ultrapure LC/MS acetonitrile | 5191-4496 |
| InfinityLab Ultrapure LC/MS methanol | 5191-4497 |
| InfinityLab Ultrapure LC/MS water | 5191-4498 |
| InfinityLab Quick Connect assembly, 0.12 x 105 mm, for connection at column inlet on UHPLC systems | 5067-5957 |
| InfinityLab Quick Connect assembly, 0.17 x 105 mm, for connection at column inlet on HPLC systems | 5067-6166 |
| InfinityLab Quick Turn fitting, for connection between column outlet and detector | 5067-5966 |
| InfinityLab Quick Turn capillary, 0.12 x 280 mm, for column outlet | 5500-1191 |
| InfinityLab Stay Safe starter kit, including 3 caps GL45 1 port and 1 cap GL45 2 ports, 4 venting valves with time strips and 4 fittings 3.2 mm | 5043-1222 |
| InfinityLab solvent filtration assembly includes glass funnel, 250 mL, membrane holder glass base, glass flask, 1 L, and aluminum clamp | 5191-6776* |
| Regenerated cellulose membrane 47 mm, 0.20 µm 100/pk | 5191-4340* |

* Solvent filtration assembly and associated filter membranes are not recommended for use with InfinityLab Ultrapure LC/MS solvents.

Agilent provides guidance in helping you meet your analytical challenges. Both customized and prepackaged (p/n R4502A) application services for cannabis potency testing are available. [Learn more](#)

Potency consumables kits

Order your kit now, using the following link:

Cannabis and Hemp Potency Consumables Kit p/n **5610-2036**

Agilent CrossLab: Supporting your success

CrossLab is an Agilent capability that integrates services and consumables to support workflow success, improve productivity, and enhance operational efficiency. Through CrossLab, Agilent strives to provide insight in every interaction to help you optimize the return you get on your instrument investment and achieve your business goals. Agilent CrossLab supports Agilent instruments and select non-Agilent instruments as well. We also provide consultative support for workflow enablement, lab analytics, regulatory compliance, inventory management, and asset management, including relocation services.

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

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