



PURPL SCIENTIFIC

CHANNEL PARTNERSHIP

FAQS

version 1.1000

This is a great resource for you to learn more about the Purpl PRO and the people and science behind it.

THIS DOCUMENT...

FREQUENTLY ASKED QUESTIONS

This document is a compilation of questions we have received from our partners, distributors, customers and prospective customers. As such, we will continually update this document as we hear from you!

Don't hesitate to give me a call, I am always eager to talk and learn from our Distributors.

- Chad Lieber

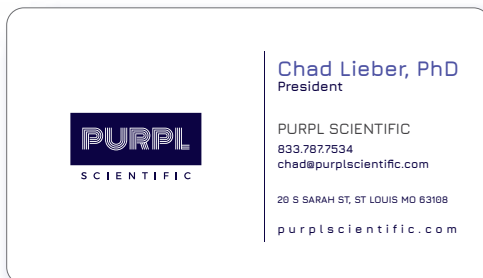


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COMPANY

1

Who is Purpl Scientific?

Purpl is a US company based in St. Louis, MO. It is a fully-owned subsidiary of Spectral Engines Oy, in Helsinki, Finland, who develops optical sensors for a variety of application areas across the globe.

2

Where are Purpl products made?

Purpl sources components from a variety of manufacturers and the Purpl PRO kit is assembled and packaged at a contracted manufacturing facility in St. Louis, MO. This manufacturing partner also ships the packaged products to distributors.

PRODUCT OPERATION

1

What is Purpl PRO?

Purpl PRO is the flagship product offering by Purpl Scientific, and the first affordable, accurate, portable potency measurement device for the cannabis industry. The Purpl PRO is a combination of a “laboratory bench” device the size of a Post-It stack and a mobile App that allows users to run the system through a smartphone.

2

How does it work?

Purpl PRO utilizes near-infrared spectroscopy, which involves shining light on the sample and analyzing the light that is returned. In this part of the light spectrum (just beyond the red light human eyes can see) molecules react to specific regions of the light to generate a “molecular fingerprint” that can be correlated with concentration. The Purpl PRO was calibrated against HPLC measurements from multiple state-certified testing laboratories.

3

How accurate is Purpl PRO?

Overall, Purpl states a +/- 2% accuracy on THC and CBD for simplicity. Statistically, it is +/- 1.89% on THC and +/- 0.96% on CBD, determined by comparison with lab HPLC measurements.

4

Why do samples from the same plant show different results?

In short: nature. Cannabis is a natural product that varies over time and by location. Colas and larf on the same plant are so named because of the difference in their flowers due to location on the plant. Even parts of the same flower generally have different potency at the cola than the lower canopy. As such, we recommend grinding a sample to get an averaged result.

5

How do I get the most consistent results?

First, make sure you operate the Purpl PRO according to its instructions—they're fairly straightforward but must be done carefully as the Purpl PRO is still a scientific testing device. Grinding a flower sample is critical to allow proper homogenization of the sample. It is also crucial that seeds, stems, or other non-flower material be avoided, and that the sample chamber is properly filled before compressing with the cap. Beyond these basic setup tips, it is expected that results may vary +/-2% between readings, which is the error of the predictions.

6

Why use the supplied SLX grinder?

Purpl selected the SLX grinder for inclusion in the Purpl PRO kit because its non-stick coating provided a significantly better resistance to product sticking. Not only does this make repeat measurements quicker and easier, it also minimizes cross-contamination of older samples from influencing the results of a new sample ground for testing. Purpl designed the add-on funnel attachment specifically for this SLX grinder to allow easier product loading into the Purpl PRO, and the included cleaning brush does a fine job of removing any residual bits from the grinder teeth.

7

Does Purpl PRO require an internet connection?

Yes, either a WiFi or cell network connection is required for the Purpl PRO to communicate with the cloud servers that compute and store the results. Errors will be shown in the Purpl PRO app if this connection isn't present.

PRODUCT OPERATION CONTINUED

8

Can Purpl PRO measure extracts?

Not yet. But in late 2019/early 2020 a software update and disposable sample cups will be released that will allow extract measurements using only a tiny amount (~100 uL) of extract.

9

Can Purpl PRO measure edibles or infused products?

No. Infused products contain a number of other ingredients that interfere with the optical measurements.

10

Can Purpl PRO measure contaminants (pesticides, molds, etc.)

No. The technology behind the Purpl PRO can only measure down to ~1-2%, and contaminants must be several orders of magnitude lower to be safely consumed.

11

Can Purpl PRO measure heavy metals?

No. The technology behind the Purpl PRO cannot detect metals.

PRICING

1

How much does Purpl PRO cost?

The Purpl PRO hardware kit has a MAP price of \$1,495. The mobile app is free to download on Apple or Google app stores.

2

What replacement parts of the Purpl PRO are recommended?

Only those parts that are susceptible to user contamination and/or breaking are recommended as replacement parts. These include the calibration cartridge assembly (PPCal), the sample holder (PPSH), sample holder cap (PPSHC), grinder (PPGrind), and grinder funnel (PPFunnel).

3

Is there a subscription fee?

In the future, additional measurement capabilities will be added to the Purpl PRO via software updates, and enabling these features may require a subscription fee by the end user. That process is still being developed and details will be released to distributors prior to implementation.

4

Does Purpl sell directly to customers?

No. Purpl products are only sold through authorized Purpl retailers.

PRODUCT USAGE

1

What other industries use Purpl PRO?

Purpl PRO is geared specifically towards the cannabis industry. However, the near-infrared technology powering Purpl PRO is used in nearly all manufacturing industries, from big agriculture to pharmaceuticals to food & beverage.

2

Is Purpl PRO a state-certified test method?

No. Most states name only HPLC or GC as certified methods. The Purpl PRO is not intended to replace mandatory third-party testing of final product and is intended to replace R&D testing which does not require HPLC or GC.

3

What are optimal use-cases for Purpl PRO?

Any time a potency measurement is needed that doesn't require third-party lab testing. Pheno hunting, optimization of cultivation parameters, R&D testing, transparency during transactions, and many more.

4

How does Purpl PRO compare to competitors (Sage, GemmaCert, myDX)?

See the Competitive Comparison chart.

5

Is Purpl PRO supposed to eliminate outside lab-testing?

No. Third-party testing is critical to maintaining proper quality assurance in final products. But the Purpl PRO can be used for all cases where third-party testing is NOT required.

6

What can Purpl test for?

Currently, Total THC and Total CBD in cured, ground flower. In 2019 a software update will also allow measurement of moisture and water activity. Towards the end of 2019/early 2020 it will also allow potency measurement of extracts.

7

How is Purpl PRO different than HPLC or GC?

Both HPLC and GC require a cannabis sample to be dissolved in liquid solvent(s) to strip away the non-cannabinoid substances, then this liquid is pushed through small tubes until an optical sensor records the amount of cannabinoid. Both techniques require continual calibration and cleaning, which necessitate trained operators. Between the cost of the instruments, the solvents, calibration materials, and the personnel, these techniques run well into the tens of thousands of dollars to set up and operate.

The Purpl PRO uses light to measure a ground sample directly, comes with its own calibration module that is indefinitely reusable and done once-per-week, and is usable by anyone. It also fits in a pocket, costs \$1,495, and leaves the sample usable after measuring.

8

Will Purpl PRO match my lab values?

In some cases it will, and in others it might not. The reason for this is that different labs generally don't obtain the same results even from the same flower sample (several published reports show this variation). Depending on the exact procedures your lab uses, the alignment of the Purpl PRO results with your lab may differ. But even if the Purpl PRO provides a different absolute result than your lab, it can still be used for comparisons between flowers, establishing trends in potency, pheno- hunting, etc.