



WHY EVERY CANNABIS PRODUCT SHOULD BE TESTED

Certain problems exist in the legal cannabis industry that are holding back its full market acceptance rates at the public, political and commercial fronts. While the cannabis industry is growing rapidly, its full potential for adoption at the state and federal levels cannot be realized until the problems associated with testing, labeling and the resulting consumer satisfaction and safety issues are ameliorated.

To understand the problems that exist, allow me to start by asking whether you would feel comfortable taking two Advil® for your headache or inflammation woes if you knew that there was less than a half of a percent chance that those two pills had actually been tested for their accuracy of the strength of their active ingredients. Deciding to take the pills under these circumstances would require a leap of faith for your personal safety, at best. On the contrary, the pharmaceutical industry must test every pill it sells, and the alcohol industry must test the contents of every bottle of spirits that is sold in commerce. So how has it come to pass that the legal cannabis industry need only test the potency of one gram of every 454 grams in each pound of product - which is the case in Colorado? The answer is that no practical way has existed to test every gram. Until now ...

The pharmaceutical industry has been transitioning from the more complex gas and liquid chromatography testing machines and processes over a decade ago, when the Food and Drug Administration (FDA) stepped into an otherwise risk averse industry and regulatory infrastructure and advised them that a change was needed. The FDA had found that a highly accurate, yet much more versatile and cost effective technology existed to enhance the state of ingredient potency testing and process control and quality. Through its Process Analytical Technology (PAT) Guidance the FDA essentially advocated that every stakeholder involved in Pharma take a pause from their reliance on the status quo for potency measurement, and try out what it had found to be a reliable alternative-optical spectroscopy for analytical testing and process improvement.

Benefits of optical testing over chromatography include the ability to perform measurements that can continuously monitor critical processes in-situ rather than offline -- in the case of liquids. For plant, or dry form of products, more versatility is offered through more frequent testing on-site, at any facility in the growing, product preparation and sales stages, by any skill of operator or employee. Additionally, the spectroscopic methods do not destroy the sample, allowing the analyst to retain the valuable commodity following its evaluation.

Sage Analytics, has developed a revolutionary product for the cannabis industry by using optical spectroscopy technology developed by its sister company, Prozess Technologies of St. Louis, Missouri, whose analytical optical testing equipment is

already in use by 20 of the top 25 pharmaceutical companies world-wide. The development team at Sage was able to leverage the know-how from its successes in pharmaceuticals, to create a cost-effective product called the Luminary™ Profiler, specific for cannabis industry.

A secondary problem for cannabis testing has yet to be corrected, and that is for all testing facilities and devices to adhere to the same reference standard for its data. At present, nearly all testing facilities rely on their own reference data set to create the next measurement profile they test. However, there is no assurance that the same product, measured at different testing facilities, will generate substantially the same results. In fact, recent media coverage of the industry has highlighted this important issue and the need for a solution. Sage Analytics recognizes this critical issue, which it is hopeful that all companies, academic, government and regulatory bodies will participate to create a “Green Standard” of data for cannabis testing that will ensure that no variation exists in measurement readings despite the testing location or testing device used.

In the meantime, the Luminary™ Profiler offers many benefits to the industry, including the ability for each industry participant to improve their quality control through regular, on-site potency measurements – a luxury that has not even been possible to date due to the high cost and skill requirement for chromatography test equipment ownership and operation. By owning, renting or leasing a Luminary however, a grower, dispensary, or extract producer can take as many measurements as they like, and not be constrained by a per-measurement cost for testing that until now could only be conducted remotely at a laboratory, requiring shipping and waiting for results. In addition, the optical test conducted by the Luminary does not require destruction of the sample. Near-infrared light is shone through a small measurement window where the product is placed, and the potency results are displayed within seconds and can also be printed on a label or receipt. Further, certain regulations have prohibited certain participants from the legal industry from even obtaining measurements, such as medical marijuana patients who grow their own product. The Luminary is now accessible to anyone, anywhere at a cost per test that is a fraction of the cost of testing by remote labs using GC/LC.

With on-site, on-demand potency measurement now available in the cannabis industry, all stakeholders will benefit and the industry will thrive in categories of consumer confidence, health and safety. Growers can harvest with greater accuracy, dispensaries can sell with greater confidence, laboratories can lower their cost of potency test, regulators need to know what’s in the marketplace, and customers deserve to be accurately informed. This is now achievable with the Luminary Profiler on the market!

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