



## **Statement Regarding Drug Testing**

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Our products are typically formulated using a combination of distillate and isolate CBD concentrates. Our CBD distillate typically contains a measurable amount of THC; however, we always formulate our finished products to contain less than the legal amount of THC per Section 7606 of the Farm Bill Act of 2014, which defines industrial hemp. Simply stated, if a finished retail product contains < 0.3% THC, it is considered a hemp product in the state of Colorado and also in many other states. We will use an example batch of 3000 mg full spectrum tincture for explanation, containing a THC content of 0.25% THC, or ~2.2 mg THC per dropper.

Typically, a urine drug test is performed which is consistent with the standard SAMHSA (Substance Abuse and Mental Health Services) urine analysis test. The report usually only states the detection limit of the test to be 50 ng/mL for THC, and if the testing result obtained for THC was greater than 50ng/mL (positive), or less than 50ng/mL (negative). With that said, the typical SAMHSA urine test is specific to THC, and typically will not include other non-psychoactive cannabinoids. We believe it is unlikely that this test included both CBD and THC. If an additional test is to be requested, a GC-MS test will absolutely be able to individually quantify THC and CBD levels in the test subjects' blood and/or urine. It is the responsibility of the consumer to understand cannabinoid levels in the products which they are purchasing/using. It is the responsibility of the consumer to understand employment, local, state, and federal laws regarding use of these products.

Getting back to our example batch of 3000 mg full spectrum tincture, I have a few more discussion points, references, and suggestions. Testing shows there is THC present in the full spectrum product, but at less than the 0.3% threshold. If the consumer was taking up to 2 mL a day (2 droppers), the consumer was potentially ingesting up to 4.4 mg THC daily. From my research, the amount of time THC is detectable in a person's system is dependent on several variables. These variables can include weight, metabolism rate, water intake, daily vs sporadic use, etc. I have not found any formula which would accurately quantify urine test results correlated with THC intake. Based solely on the average weight of an adult human and daily use for about 90 days, I would say it is indeed possible for a drug test to come back positive for THC, which is stated on the PHB website in our FAQ section (<https://purehempbotanicals.com/hemp-faq/>).



This is also referenced in a couple different places

<https://www.leafly.com/news/cannabis-101/does-using-cbd-hemp-oil-result-in-a-positive-drug-test-for-thc-or>

"An individual consuming 1000-2000 mg per day of hemp oil would thus consume approximately 3-6 mg of THC. This exceedingly high dose may result in detection of positive urine screen in up to 11% to 23% of assays."

Just for the record, we don't agree that 1000-2000 mg hemp oil daily is "exceedingly high".

<https://www.ncbi.nlm.nih.gov/pubmed/11765026>

"Fifteen THC-naïve adults ingested, over four successive 10-day periods, single daily THC doses ranging from 0.09 to 0.6 mg. Subjects self-administered THC in 15-mL aliquots (20 mL for the 0.6-mg dose) of four different blends of hemp and canola oils. Urine specimens were collected prior to the first ingestion of oil, on days 9 and 10 of each of the four study periods, and 1 and 3 days after the last ingestion. All specimens were screened for cannabinoids by radioimmunoassay (Immunoanalysis Direct RIA Kit), confirmed for THC-COOH by gas chromatography-mass spectrometry (GC-MS), and analyzed for creatinine to identify dilute specimens. None of the subjects who ingested daily doses of 0.45 mg of THC screened positive at the 50-ng/mL cutoff. At a daily THC dose of 0.6 mg, one specimen screened positive."

Note the latter reference is using a different initial test than the SAMHSA urine test.

These online articles go on to say that when the daily THC intake is reduced to 0.6 mg THC per day, approximately 6.67% tests will come back positive for THC, and if the daily THC intake is reduced further, to < 0.5 mg THC, only 0.2% of tests came back positive for THC. Additionally, in the second article, it states that the highest GC-MS test obtained for a study participant ingesting 0.6 mg THC daily was 5.2 ng/mL, "well below the 15-ng/mL confirmation cutoff used in federal drug testing programs."

With all of this said, there are a couple of options that we may be able to recommend:

1. Instead of using 1-2 droppers of the 3000 mg full spectrum tincture daily, perhaps try a lower dosage full spectrum product.
2. Try our products manufactured using only CBD isolate. We offer a frost product, and also a full line of isolate tincture. These products contain a non-detectable amount of THC by our analytical methods, and would be a better option for those who want to minimize THC intake. Considering a daily dose of 100-200 mg CBD, that would equate



to < 0.3 mg THC daily. According to our research, this may put the consumer at less risk of testing positive for THC.

We cannot provide an absolute answer, and we cannot guarantee the information provided can eliminate the risk of positive drug tests for THC, but to maintain client relationships, the above information is the best information I have in order to advise our consumers what may be a good path for them. Ultimately, we are not doctors/lawyers, and we cannot give absolute answers, but the information I have stated above I consider to be reliable, but again, even if these guidelines are followed, we cannot guarantee a passing drug test.