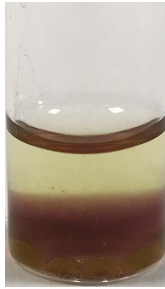




## Instructions CBD/THC Test

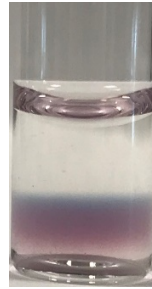
- Break off the top with the plastic ampoule breaker (on top of each test ampoule)
- Insert 1 drop or 1 spatula of the suspected material into the ampoule.
- Stir the sample in the ampoule.
- Take the blue buffer bottle and add 3 drops into the ampoule.
- Do **not shake** the ampoule for the first 2 minutes, so that a color layer can be developed on the bottom of the ampoule.  
*(this can provide an early indication of the compound)*
- If the bottom layer is pink/purple it indicates the presence of CBD. If a blue color develops it indicates the presence of THC. When both colors are visible, it indicates the presence of both CBD and THC.



CBD Suspect low THC



Marijuana or suspected high THC



Thin light blue top layer and pink/purple bottom layer presence of THC and higher presence of CBD



Thin darker blue top layer and pink/purple bottom layer presence of THC (higher than CBD) and lower presence of CBD

- Shake the ampoule and wait for 3 more minutes.
- Samples with both CBD and THC will develop a purple color in the beginning and after a few minutes it will develop its final color being pink/purple (CBD) or blue/dark blue (THC). These final colors define whether there is a higher CBD or a higher THC concentration level present in the sample.
- Samples with greater differences in concentrations of CBD and THC will get their final color faster.

### High CBD contents



### High THC contents



- *Note: there might always be some variation in the color reactions due to the composition of the compound.*

## **FAQ**

### **Does the test identify a specific percentage of THC?**

The test is not a quantitative test. The test is a presumptive qualitative test that identifies a ratio of cannabinoids to THC (9-tetrahydrocannabinol). While a specific percentage is not detectable, low levels of THC versus cannabinoids is an indicator of low level THC products like CBD, and high levels of THC to cannabinoids is an indicator of marijuana. Typical CBD products are under 1% THC content while marijuana ranges from 5-30% THC.

### **How was the test validated?**

To validate the test, samples of known marijuana and CBD were tested. Development tests were sampled using CBD verified at below 0.3% THC and marijuana verified at more than 5% THC. Multiple tests were tested multiple times and each resulted in the correct color change.

### **What is the shelf life of the test?**

The test is stable for at least 18 months. The components may break down over time affecting the results, so as a precaution, we have established a shorter shelf life than many of the traditional MMC tests.

### **Is this the same test as the 4-aminophenol test (Swiss 4-AP)?**

The test is based on 4-aminophenol. There have been modifications to the ratio of chemicals and the solvent used to improve extraction and performance, but the test performs in the same manner. The reaction is completed based on the ratio of THC to cannabinoids present, yielding the two colors.

### **Can this test be used for oils / liquid CBD items?**

Liquids and oils that are concentrates can be tested with this reagent. The liquid or oil must be a concentrate to yield proper results, so only test items labeled or described as CBD or CBD solutions or oils. Do not test products that only list CBD/CBD as an ingredient. While technically liquids, lotions, creams, beverages, and similar items should not be tested using the presumptive test as they don't extract well and can contain dyes or other ingredients that will affect the results.

### **Can you get a positive for CBD and marijuana on the same plant?**

The test is sensitive to a ratio of THC to cannabinoids. Within the plant, these levels vary. Typically, the leaves and flower buds contain the highest concentration of THC in any part of the plant. The stems and seeds usually have lower concentration of THC, but still contain cannabinoids. Aging of material may also cause different results. As plant material dries and ages, the level of THC and cannabinoids can be reduced. It is possible to obtain different results when testing different plant parts and different aged materials. These factors must be considered when testing. Flower buds and leaves are the preferred materials to test to yield the most accurate results. Material should not be extremely dry or old either. Very old or dry samples will appear brown and dust like, and do not have the pungent smell of a fresher sample.

### **If you get a positive for high levels of THC on this test, why do you still need to test with the traditional tests for Cannabis?**

All presumptive tests, including this test, as well as the traditional cannabis tests are strictly qualitative and test for a substance family, and therefore are presumptive until confirmed in the lab. This test is even more general identifying a ratio or range of THC levels, and therefore is not definitive enough to stand alone for probable cause. To satisfy most established protocols, the presumptive field test used by the department for cannabis (THC) must be used to further identify the substance as a controlled substance that would lead to a seizure or arrest. As always, even positive results in both the CBD/THC screening test as well as the traditional Cannabis tests are still presumptive and must be verified in a certified controlled substance laboratory.