

Is Your CBD Safe?



CannaSafe


www.CSALabs.com

Why is CBD Safety Testing so Important?


CBD, a popular non-psychoactive cannabinoid showing great therapeutic promise, can be sourced in one of two ways—from the hemp plant (*Cannabis Sativa*) or from the marijuana plant (*Cannabis Indica*), a subspecies of *Cannabis Sativa*. CBD derived from marijuana is regulated by the State just as other THC-containing cannabis products, however, CBD derived from hemp is not regulated, and is only federally required to be tested for potency, making sure it contains no more than 0.3% THC.

Due to this serious lack of regulation, many CBD products currently on the market are mislabeled (some may not even contain CBD at all!), while others may contain dangerous contaminants such as residual solvents and heavy metals.






In order for CBD to be determined safe, it should be thoroughly tested by an ISO accredited third-party laboratory for both accuracy and safety.




Part of this testing confirms label claims, ensuring that what a brand says is in the product is actually in that product. Typically, this would confirm the presence and amount of CBD, for example.

Next, and most importantly, safety testing is used to identify the presence of a number of harmful contaminants, including pesticides (like myclobutanil which turns into hydrogen cyanide when ignited), residual solvents (like butane), pathogens (like E.coli), heavy metals (like lead), and mycotoxins (like Aflatoxin).

Each of these present varying dangers to human health, and when inhaled, consumed, or even applied topically, they can lead to serious problems.



The good news? These dangers are easy to avoid. Buy from brands who do strict third-party testing.



Shop at a licensed dispensary, check product COAs (see page 7), and consume confidently.

Stay Safe!

How do

Dangerous Contaminants

Make Their Way into Products?

Pesticides:

There are diverse cannabis and hemp cultivation methods, including outdoor, greenhouse, and indoor, each utilizing different pesticides depending on their growing environments. There are two types of pesticides—systemic and non-systemic. Non-systemic pesticides are topical pesticides that can be easily washed off of a plant before use, whereas systemic pesticides are actually absorbed by a plant when applied to seeds, soil, or leaves. Many pesticides pose great harm to human health. For this reason, flower and final products must be screened for any dangerous pesticides prior to consumption.



Residual Solvents:

Cannabis, hemp, and CBD products undergo a variety of processing techniques before they make it onto dispensary shelves. While some manufacturers use “solvent-free” techniques that don’t introduce any potential adulterants into products, many manufacturers use different types of solvents like butane, isopropyl alcohol, propane, or ethanol, depending on their extraction needs. When consumed or inhaled by humans, these solvents can cause harm to the body and lungs. Thus, products must be tested to ensure that any solvents used in manufacturing and production have been properly removed.



Heavy Metals:

Inhalation or ingestion of heavy metals can cause severe illness, including neurotoxicity, in humans. By nature, the cannabis and hemp plant will accumulate metals and other elements from the air, soil, water, pesticides, and fertilizers in their cultivation environment—both outdoors and indoors. Heavy metals can also be introduced during the manufacturing process and can hide in surprising places such as in hardware or final packaging, leaching into the product over time. For this reason, it's important to complete stability testing (shelf-life studies) to determine how a product changes over time and under certain storage conditions.

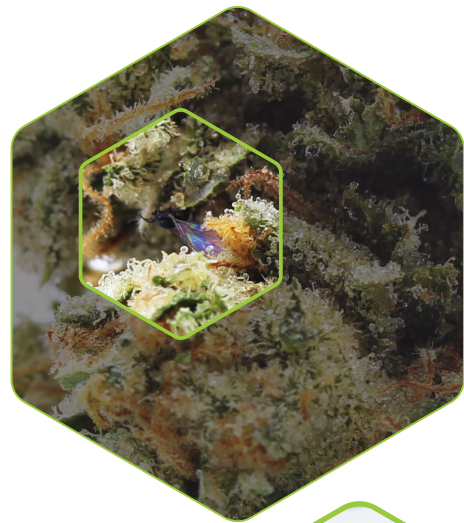


Mycotoxins:

Mycotoxins are naturally occurring toxins in molds and fungi. They can be found on many food crops like grains, nuts, fruit, and cannabis and hemp crops—especially under warm and humid conditions which are conducive to microbial growth. Ingestion or inhalation of mycotoxins by humans can cause great harm including nausea, vomiting, or death.

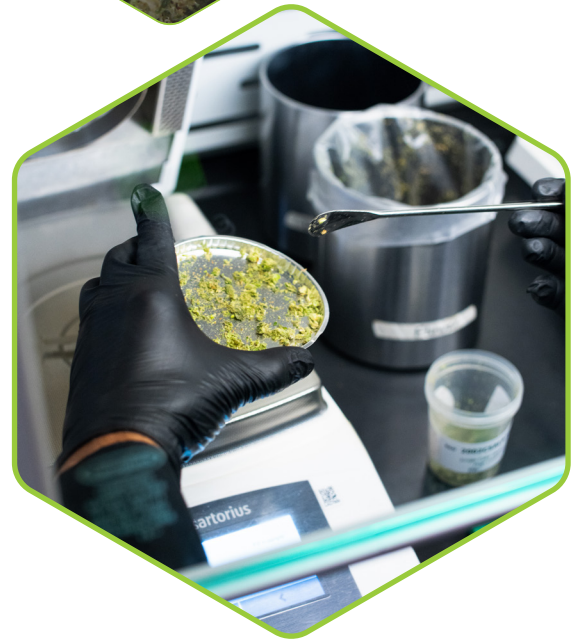
Foreign Matter:

Hair, mold, insects, cinders, sand, dirt, soil, and even Mammalia excreta (fecal matter) can make their way into products during cultivation, curing, manufacturing, storage, and transporting—despite best efforts to avoid them. Often, improper product handling or facility cleanliness issues in production stages are the cause. It's important to screen for any foreign matter contaminants to ensure safety.



Moisture/Water Activity:

All plants are made up of mostly water. Harvested cannabis and hemp must be dried appropriately prior to storage or manufacturing, as too much water will create a breeding ground for microbial growth such as bacteria, yeast, and mold. The drying process must also be consistent across an entire batch for safety and to accurately determine microbial viability (the probability of any growth occurring). Testing for moisture and water activity is an important measure to confirm shelf-life and stability of a product.



Microbial Pathogens:

Pathogenic bacteria can pose serious health risks to humans, especially to those whose immune systems are compromised. Respiratory problems, gastroenteritis, and diarrhea are among the effects of inhaling or consuming microorganisms. It's imperative to test the final product to ensure it's free from any microorganisms that may have been introduced during cultivation, transportation, manufacturing, storage—or even spread by whiteflies, as in the case of *Aspergillus*.



How do Brands Prove Their Label Claims?

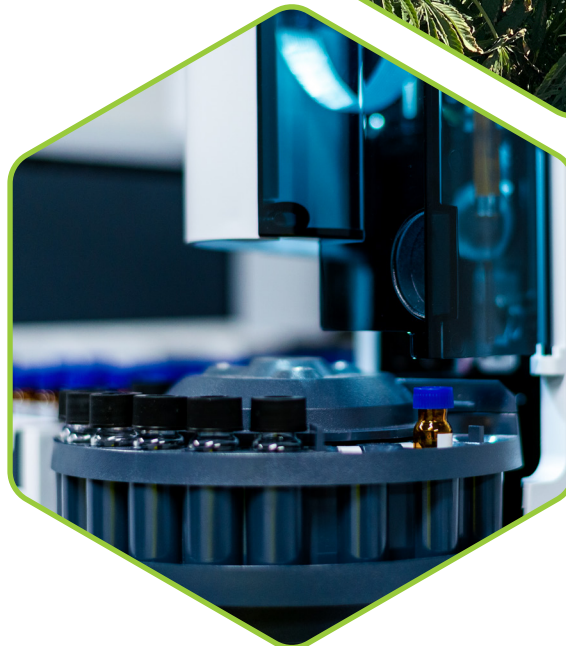
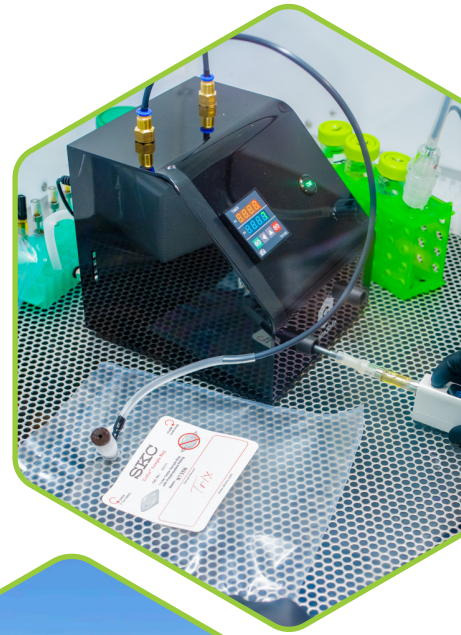
Laboratory tests are the only way to confirm label claims. Potency test results declare the factual amount of cannabinoid content like THC and CBD, while terpene profiling indicates the presence and quantity of terpenes in the product. Terpenes help differentiate strains and have a powerful influence over the effect and experience of the cannabis being consumed. Because of their importance, potency and terpene data are the most commonly made label claims to help consumers choose products that fit their needs.

Potency:

Potency testing measures the cannabinoids in cannabis and hemp. To confirm that that a plant or product will cause a desired effect or intensity, its potency must be accurately calculated.

Terpene Profiles:

Testing for terpene profiles helps to identify unique strains, allowing consumers to make more informed decisions about products that work best for their needs.



Questions about Safety?

Call or email CannaSafe at
1 (818) 922-2416 or info@csalabs.com

CannaSafe is the world's first ISO 17025 accredited cannabis testing lab and is fully accredited on all compliance testing methodologies. Built on quality and integrity, CannaSafe has expert teams and processes in place that ensure accurate and dependable testing results.



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