

Short answer: the federal definition of hemp is shifting to a **total THC** calculation that includes THCA. Under the revised approach, the calculation is generally expressed as **delta-9 plus 0.877 THCA**—more precisely, delta-9 THC plus THCA multiplied by 0.877. That conversion estimates how much delta-9 THC could result when THCA is heated and decarboxylated.

The change also introduces a much stricter limit for certain hemp-derived cannabinoid products: a cap measured in milligrams *per container*, not just by percentage of the product's dry weight. The key federal dates are **November 12, 2026**, and **December 11, 2026**. For businesses and consumers, the practical takeaway is to check the applicable date, product category, state rules, and a current batch-specific certificate of analysis (COA)—not just a label saying “hemp-derived.”

What “total THC includes THCA” means

THCA, or tetrahydrocannabinolic acid, is a cannabinoid found in raw cannabis and hemp. It is chemically related to delta-9 THC but is not counted in the same way as delta-9 THC in every existing legal or testing framework. When heated, THCA can lose a molecule of carbon dioxide and convert into delta-9 THC. This process is called decarboxylation.

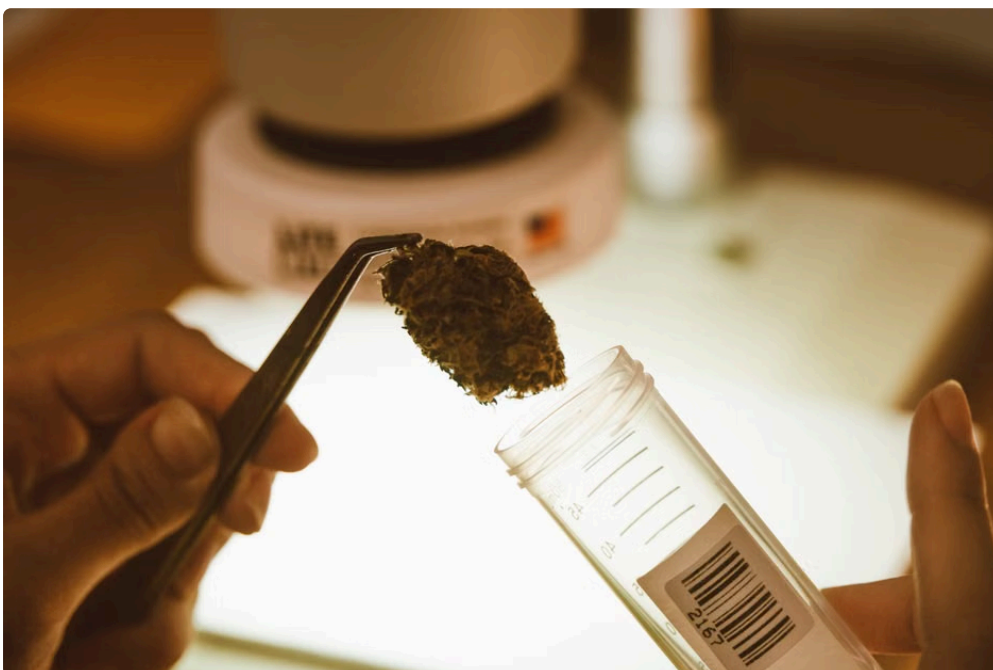
That conversion is why a total-THC calculation accounts for THCA. A product could show a low amount of delta-9 THC on a test and still contain a meaningful amount of THCA that may become delta-9 THC when heated. Looking only at the delta-9 line can therefore give an incomplete picture.

The quick math: delta-9 plus 0.877 THCA

The commonly used calculation is:

$$\text{Total THC} = \text{delta-9 THC} + (\text{THCA} \times 0.877)$$

The 0.877 factor adjusts for the difference in molecular weight when THCA converts to delta-9 THC. It is not an extra potency multiplier chosen by a brand; it is a conversion factor used in the calculation.



Lab result Calculation Estimated total THC 0.20% delta-9 THC and 1.00% THCA $0.20\% + (1.00\% \times 0.877)$ 1.077%
total THC 1 mg delta-9 THC and 2 mg THCA per serving $1 \text{ mg} + (2 \text{ mg} \times 0.877)$ 2.754 mg total THC per serving

These examples illustrate the calculation only; they do not determine whether a product is lawful. Applicable rules may specify a different testing method, product category, or limit.



What changes in the federal hemp definition?

The familiar federal hemp definition has generally hinged on a concentration threshold of no more than 0.3% delta-9 THC on a dry-weight basis. Under the change scheduled to take effect on **November 12, 2026**, the definition shifts toward total THC, including THCA in the calculation. That means a product or material cannot rely on a low delta-9 result alone if its THCA pushes the total above the applicable threshold.

This is a significant change for products marketed as “THCA hemp.” The word “hemp” on a package—or a delta-9 result below 0.3%—does not, by itself, show that the product meets the revised federal definition. The relevant analysis has to include the cannabinoids the rule counts and use the applicable measurement basis.

Why total THC matters in practice

- **Flower and smokable products:** Heating can convert THCA to delta-9 THC, so a delta-9-only result may not describe the product’s potential THC after heating.
- **Edibles and other ingestibles:** The COA and label should make clear whether cannabinoid amounts are reported per serving, per package, or both.
- **Retail compliance:** Staff should avoid saying a product is “legal” solely because its delta-9 percentage is low.
- **Manufacturing and sourcing:** Ingredient levels and batch results can vary, so an older COA should not be treated as proof for a new batch.

Why the per-container THC cap is stricter

The revised federal framework also sets a limit for certain hemp-derived cannabinoid products based on the amount of THC **per container**. The cap is stated in milligrams rather than as a percentage of dry weight. That makes it a different—and potentially much tighter—test than the traditional 0.3% by-dry-weight standard.

Here is why the distinction matters: a percentage describes concentration relative to a product's weight; a per-container cap describes the total amount in the whole package. A large package can contain a small percentage of THC yet still add up to more milligrams than the container limit allows. Conversely, a small serving may appear low in THC while the full package contains many servings.

Per serving versus per container: a quick math example

Suppose a hypothetical product contains 0.25 mg total THC per serving and has 10 servings in the package. The container total is:

0.25 mg per serving × 10 servings = 2.5 mg per container.

For a per-container rule, the relevant figure is the 2.5 mg in the whole package—not just the 0.25 mg listed for one serving. Always check the exact statutory limit and which products it covers; do not assume a serving-size claim answers a container-level question.

This cap is stricter because it can restrict products that might otherwise appear compliant under a percentage-based test. It also makes package size and serving count important compliance details. For manufacturers and retailers, calculations should be supported by reliable batch data and labeling that clearly distinguishes per-serving amounts from package totals.

How the two federal dates fit together: November 12 vs. December 11, 2026

The rollout is described in two stages. **November 12, 2026**, is the date the revised hemp-definition framework is scheduled to take effect. **December 11, 2026**, is a later date associated with the per-container limit for covered hemp-derived cannabinoid products.

Date What to understand Practical question November 12, 2026 The shift to a definition that accounts for total THC, including THCA, is scheduled to begin. Does the product meet the applicable total-THC test, rather than relying only on delta-9? December 11, 2026 The later phase involving the per-container THC cap for covered products is scheduled to apply. How many milligrams of counted THC are in the entire container?

These dates are close together, but they are not interchangeable. A product that passes one test may still fail another. Businesses should confirm the exact statutory text, agency guidance, and any later updates before making inventory, labeling, or sales decisions. State rules can also be stricter or use different definitions, [hemp-derived cannabinoids](#) [ban](#) and other requirements may apply to food, supplements, age-restricted products, or intoxicating cannabinoids.

How to read a COA for THCA and total THC

A certificate of analysis (COA) is a laboratory report for a particular sample or batch. It can help verify cannabinoid content, but it is useful only when it matches the product being sold and reports the information needed for the relevant rule.

1. **Match the COA to the batch.** Check the product name, lot or batch number, sample date, and lab report date. A report from an earlier batch is not a substitute for testing the current one.
2. **Look for both delta-9 THC and THCA.** A report that lists only delta-9 may not answer whether total THC includes THCA.

3. **Check the units.** Results may be shown as a percentage, milligrams per gram, milligrams per serving, or milligrams per package. Do not compare figures without converting to the same basis.
4. **Review the calculation.** Where appropriate, confirm that the report or compliance worksheet accounts for THCA using the applicable conversion method, such as delta-9 plus 0.877 THCA.
5. **Confirm the package total.** Multiply a per-serving amount by the number of servings when the rule applies per container.
6. **Check what the lab tested.** Third-party lab testing can support quality and compliance checks, but the sample should be representative and the lab's methods and accreditation should be reviewed.

For example, if a COA lists 0.4 mg delta-9 THC and 1 mg THCA per serving, the example total-THC calculation is $0.4 + (1 \times 0.877)$, or 1.277 mg per serving. If the package contains eight servings, that would equal about 10.216 mg per container under this calculation. Whether that amount is permitted depends on the applicable rule and product category.

What consumers and retailers should do now

Consumers should treat "hemp-derived," "low delta-9," and "THCA" as product descriptions—not as guarantees of legality, safety, or a specific effect. Review the label and COA, pay attention to serving and package totals, and check local rules. Do not rely on broad claims such as "legal in all 50 states." Laws and enforcement can differ by state and change over time.

Retailers can prepare by organizing current COAs by product and lot, training staff to explain the difference between delta-9 THC and THCA, and reviewing labels for clear per-serving and per-container amounts. A brand such as Joy Organics, like any CBD or hemp brand, should be evaluated product by product: look at its current testing documents and labeling rather than assuming every product has the same cannabinoid profile or regulatory status.

One phrase worth treating carefully is "**THC-free.**" That claim should be supported by a current, batch-specific test with an appropriate detection limit; "not detected" does not always mean absolute zero. Similarly, a COA that omits THCA may not answer a total-THC question.

Bottom line

Yes—under the scheduled federal change, total THC includes THCA. The key concept is **delta-9 plus 0.877 THCA**, reflecting THCA conversion to delta-9 when heated. The change scheduled for November 12, 2026, is distinct from the later December 11, 2026, per-container phase. Because the latter measures milligrams in the whole package, a product's serving-size number may not tell the full compliance story.

For any specific product, check the current law and state requirements, then review a batch-matched COA that reports both delta-9 THC and THCA. That is a more dependable starting point than a marketing phrase or a delta-9-only result.