HEMP ANALYSIS
Raw Material and Finished Products

STAGE 1 TESTING
THC content and validated cannabinoids analysis: $700

- **Turnaround time:** TBD; predicated on sample receipt and lab volume
- **Sample volume needed:** 30 grams (minimum)

The most critical tests for ALL hemp and hemp-derived CBD samples are THC analysis (must measure at or below 0.3% by dry weight) and the cannabinoid screen which quantifies cannabinoid compounds in the sample. The results determine what “next steps” might be taken.

**Cannabinoids to be analyzed and reported:**
- CBD (Cannabidiol)
- CBDA (Cannabidiolic acid)
- CBDV (Cannabidivarin)
- CBG (Cannabigerol)
- CBGA (Cannabigerolic acid)
- CBN (Cannabinol)
- CBC (Cannabichromene)
- Delta-8-THC
- Delta-9-THC
- Palmitoylethanolamide
- THCA (Tetrahydrocannabinolic acid)
- THCV (Tetrahydrocannabivarin)

**Sample types include:**
- Hemp essential oil (raw material; finished products are normally the essential oil mixed with other oils)
- CBD isolate oil (needs to be at a concentration less than 50%)
- Hemp protein (powder or packed capsule raw material)
- Hemp seed oil
- Hemp soft gel oil suspension

For a multi-ingredient formulated finished product including raw hemp material (as the source of CBD), we may recommend method development and validation.

**NSF IS:**
- DEA-licensed laboratory
- ISO 17025 accredited
- Employing AOAC-validated methods
STAGE 2 ADD-ON TESTS
Satisfactory results of Stage 1 tests permit subsequent testing.

<table>
<thead>
<tr>
<th>TEST NAME</th>
<th>PRICE/SPL</th>
<th>TURNAROUND TIME</th>
<th>VOLUME NEEDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pesticide analysis</td>
<td>$680</td>
<td>12 days after Stage 1</td>
<td>300 grams for powder, 25 mL for oils (minimum)</td>
</tr>
<tr>
<td>Glyphosate screen</td>
<td>$330</td>
<td>12 days after Stage 1</td>
<td>10 mL minimum</td>
</tr>
<tr>
<td>Protein quantification</td>
<td>$45</td>
<td>12 days after Stage 1</td>
<td>10 grams minimum</td>
</tr>
<tr>
<td>Heavy metals (lead, arsenic, mercury, cadmium)</td>
<td>$210</td>
<td>10 days after Stage 1</td>
<td>10 grams minimum</td>
</tr>
<tr>
<td>Total combined mold/yeast, total aerobic microbes,</td>
<td>$180</td>
<td>8 days after Stage 1</td>
<td>300 grams minimum</td>
</tr>
<tr>
<td>enterobacterial count, Salmonella species, Staphylococcus aureus, Pseudomonas aeruginosa, Escherichia coli</td>
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</tbody>
</table>

“BEST OF THE BEST” - PLANT MATERIAL VERIFICATION FOR HEMP

Interested in showing your customers your commitment to quality? NSF’s third-party independent testing, listing and mark verify hemp ingredients for sellers, buyers, growers, processors, distributors and manufacturers. Let NSF confirm the integrity of your raw ingredients early in the supply chain.

We can verify your raw hemp material (essential oil, protein, seed oil or oil suspension) is at or below 0.3% THC by dry weight though our plant material verification for hemp.

Our testing:

> Confirms 0.3% or less THC content on a dry weight basis
> Provides a validated cannabinoid analysis
> Supports regulatory and product requirements

Meeting the requirements of the potency testing of hemp raw ingredients verifies your products with:

> A “Plant Material Verified” certificate
> The “Hemp Verified by NSF” mark
> An official NSF listing on our website: www.nsf.org

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