

UNDERSTANDING THE CERTIFICATE OF ANALYSIS

WHAT IS A COA?

A certificate of analysis (COA) provides critical information to help your customers understand what a product contains and verify that ingredients are compliant with federal and state regulations.

Each Zilis COA contains test results for:

- Heavy metals
- Residual solvents
- Pesticides, herbicides, and fungicides
- Microbiology
- Cannabinoids

We ensure our products are of the highest quality through a strict quality program, including mandatory testing of every batch.

WHAT ARE HEAVY METALS?

The Food and Drug Administration (FDA) has identified four naturally-occurring heavy metal elements, nicknamed “The Big 4” that are commonly found in our environment, and has defined acceptable limits for each of these metals in food and dietary supplements.

These are:

- Lead
- Mercury
- Arsenic
- Cadmium

These elements are naturally found in the soil, air, and water, and can be absorbed by plants. Testing ensures that our products are not only FDA compliant but also safe for your customers!

WHAT ARE RESIDUAL SOLVENTS?

Solvents are very important for the creation of pharmaceutical and dietary supplement products and are often used at the beginning of the manufacturing process to create the active ingredients for ointments and other topical products. Residual solvent analysis determines whether solvents such as butane, ethanol, propane, hexane, and acetone are present in harmful levels in our products.

WHY IS IT IMPORTANT TO TEST FOR PESTICIDES, HERBICIDES, AND FUNGICIDES?

Our products are also analyzed for pesticides (insect-killers), herbicides (weed-killers), and fungicides (fungus-killers) to assure our products do not contain these ingredients. The levels of pesticides, herbicides, and fungicides are measured in both harvested hemp and in finished products.

WHY TEST THE MICROBIOLOGY OF EACH BATCH?

Bacteria like *E. coli*, *Salmonella*, and *Listeria* are harmful food-borne bacteria that can contaminate food and water. Testing for these bacteria, as well as yeast and mold, is crucial for the safety of products that are ingested. A sample of each batch is subjected to multiple tests to assure the absence of microorganisms (i.e. bacteria, yeast, or mold) to guarantee the purity of our products.

