



UNDERSTANDING MICROBIAL ANALYSIS

Microorganisms are everywhere and although most of them are not harmful it is important to be aware of their presence and monitor for the harmful microorganisms known as pathogens. To help monitor these microorganisms, Desert Valley Testing offers four different types of Microbiological Tests that quantify the number of microorganisms in CFU/gram. A colony-forming unit (CFU) is a unit used to estimate the number of viable bacteria or fungal cells in a sample. Below lists the four tests currently offered, their intended purpose as well as existing recommended guidelines to help you understand your reported CFU/gram results:

- ❖ **Rapid Yeast & Mold Plate Count** (reported CFU/gram) Intended to indicate the level of yeast and mold in a product or sample. *Total Yeast and Mold Count < 10,000 CFU*
- ❖ **Coliform/E.coli Bacteria Plate Count** (reported CFU/gram) Intended to indicate that pathogenic microorganisms of fecal origin may be present in a product or sample. The coliform test is a general test for Gram-negative bacteria that ferment lactose to gas and acid. *Total coliforms count < 1000 CFU*¹ *E. Coli (pathogenic strains) (none detected) **
- ❖ **Aerobic Bacteria Plate Count** (reported CFU/gram) Also known as a standard plate count and is intended to indicate the level of microorganism in a product or sample. *Total Viable Aerobic Bacteria Count < 100,000 CFU*
- ❖ **Enterobacteria Plate Count** (reported CFU/gram) Intended to indicate potential sources of contamination in a product or sample. This plate enumerates all coliforms as well as potential pathogens such as Salmonella, although it does not distinguish Salmonella from other enterobacteria. *Salmonella (none detected) **

Please note Arizona does not require state-mandated testing for cannabis products. These limits provided above are guidelines by the Cannabis Safety Institute, to be used ONLY as reference or guidance and NOT information DVT mandates or suggests.

REFERENCES

*Based on the recommended guidelines stated above if the report results are "None detected" then no pathogens were detected and the sample/product is safe for use. However, if the report results show any CFU/gram amount no matter what the number is, then pathogens were detected and the sample/product is considered harmful to humans and not okay for use.

Microbiological Safety Testing of Cannabis, Existing Guidelines (May 2015)(Cannabis Safety Institute) pages 4 and 5.

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