



Designation: D8334/D8334M – 20

Standard Practice for Sampling of Cannabis/Hemp Post-Harvest Batches for Laboratory Analyses¹

This standard is issued under the fixed designation D8334/D8334M; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

1. Scope

1.1 Cannabis harvested materials require sampling strategies throughout their life cycle, from cultivation to the end consumer. For purposes of this standard, the term cannabis is inclusive of all cannabis inflorescence, including hemp varieties. The qualitative and quantitative characteristics of cannabis/hemp for human or animal consumption has safety implications throughout the life cycle from cultivation to end consumer. This standard provides best practice procedures and protocols for sampling batches of harvested cannabis inflorescence. Cannabis/hemp materials often exhibit variability across different parts within the same plant or across different plants within the same cultivar, or both, (1, 2).² Thus, sampling strategies are required which yield a representative sample across a harvest batch. Representative sampling is required to ensure that the qualitative and quantitative test results accurately reflect cannabinoid identification, potency, identification and concentration of terpenes, concentration of trace metals, microbiological activity, mycotoxins, and concentration of pesticides across the batch.

1.2 Where procedural aspects of this practice differ from local regulatory or jurisdictional requirements, the local regulatory or jurisdictional authority's directives shall take precedence.

1.3 *Units*—The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system are not necessarily exact equivalents; therefore, to ensure conformance with the standard, each system shall be used independently of the other, and values from the two systems shall not be combined.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

¹ This practice is under the jurisdiction of ASTM Committee D37 on Cannabis and is the direct responsibility of Subcommittee D37.03 on Laboratory.

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² The boldface numbers in parentheses refer to a list of references at the end of this standard.

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards*:³

D8270 Terminology Relating to Cannabis

3. Terminology

3.1 *Definitions*—For general terms related to cannabis, see Terminology D8270.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *aliquot, n*—a discrete quantity of a cannabis/hemp (raw material) inflorescence collected by laboratory personnel/certified/trained sample collectors that shall be combined into representative samples for purposes of testing.

3.2.2 *cannabis, n*—a genus of flowering plants within the Cannabaceae family identified by their distinctive glandular trichomes, divided serrated leaves, and tough bast fibers.

3.2.2.1 *Discussion*—In this standard, the term cannabis is used to mean cannabis raw material that includes resin cannabis, nutritional cannabis, and industrial cannabis, that includes hemp, in a harvested raw material form.

3.2.3 *composite sample, n*—a final mixture of all sample aliquots pulled within a specific harvest batch, homogenized, and labelled.

3.2.4 *harvest batch, n*—a specifically identified quantity of cannabis inflorescence, that is uniform in cultivar, harvested within a concurrent time frame, and, cultivated using the same pesticides and other agricultural chemicals.

3.2.5 *inflorescence, n*—a group or cluster of flowers arranged on a stem that is composed of a main branch or a

³ For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.