



Designation: D8417 – 21

# Standard Guide for Sampling of Hempseed Intended for Human Consumption<sup>1</sup>

This standard is issued under the fixed designation D8417; 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 reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

## INTRODUCTION

Sampling of bulk hempseed may be undertaken routinely for quality or food safety control, buyer specification, or to validate export or import standards for government regulatory bodies. Samples are required for routine testing to identify physical attributes, moisture level, rancidity, microbial load, potential disease, or variety verification. Testing may be a mandatory prerequisite for international trade or for purposes as determined by international seed certification agencies to identify purity and other traits. This guide describes procedures for field conditions to enable consistent, objective, and repeatable sampling results for business-to-business transactions.

## 1. Scope

1.1 This guide covers recommended steps used in collection of a representative field sample of bulk hempseed intended for human consumption.

1.2 This guide applies to plant breeders, hempseed producers/farmers, seed cleaners, storage facilities, laboratories, and processors who handle bulk hempseed.

1.3 *Units*—The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

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.*

1.5 *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*:<sup>2</sup>

**D8270 Terminology Relating to Cannabis**

2.2 *Canadian Grain Commission Documents*:<sup>3</sup>  
**Official Grain Grading Guide**

2.3 *Canadian Herb, Spice, Specialty Agriculture and Natural Health Products Coalition*:<sup>4</sup>

**Good Agricultural and Collection Practices (GACP)**

2.4 *Canadian Seed Institute Document*:<sup>5</sup>

**Technical Manual on Sampling Appendix 3–1, 2021**

## 3. Terminology

3.1 *Definitions*—For definitions for terms related to cannabis, refer to Terminology **D8270**.

3.2 *Definitions of Terms Specific to This Standard*:

3.2.1 *composite sample, n*—a sample formed by combining and mixing all primary sub-samples taken from the lot.

3.2.2 *hemp, n*—a *Cannabis sativa* L. plant, or any part of that plant, in which the concentration of total delta-9 tetrahydrocannabinol (THC) in the flowering tops is equal to or less than the regulated maximum level as established by authorities having jurisdiction (AHJ).

3.2.2.1 *Discussion*—The term hemp is synonymous with industrial hemp.

3.2.3 *hempseed, n*—intact achene (fruit) produced from a hemp plant that is capable of normal germination.

3.2.3.1 *Discussion*—Primarily used for sowing to grow a plant or for further processing, this is sometimes known as hemp grain or hemp seed.

<sup>1</sup> This guide is under the jurisdiction of ASTM Committee **D37** on Cannabis and is the direct responsibility of Subcommittee **D37.07** on Industrial Hemp.

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

<sup>3</sup> Available from Canadian Grain Commission, <https://www.grainscanada.gc.ca>.

<sup>4</sup> Available from Canadian Herb, Spice, Specialty Agriculture and Natural Health Products Coalition, <https://www.chsnc.ca/g-a-c-p-s>.

<sup>5</sup> Available from Canadian Seed Institute, <https://csi-ics.com/canadian-seed-institute>.