



Designation: D8450 – 22

Standard Specification for Environmental Conditions While Packaging Cannabis/Hemp Flower¹

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INTRODUCTION

The cannabis/hemp industry, from seed to consumption, is undergoing a transition and modernization. Thus, standards for ensuring safety, quality, and weight stabilization during key steps of the cannabis/hemp flowers sojourn are in order. This specification is needed to ensure safety, quality, and weight stabilization of cannabis/hemp flower and will be used by purveyors who move the cured crop to packaging used for distribution to another licensed operator or the end user.

1. Scope

1.1 This standard specifies the environmental conditions, such as temperature, humidity, and lighting, under which cannabis/hemp flowers intended for human use are to be packaged to ensure the safety, quality, and weight stabilization of the packaged flower. This specification does not apply to frozen cannabis/hemp nor to cannabis/hemp intended for extraction.

1.2 This specification applies only to controlling an indoor environment (heat, cooling, humidity control) surrounding packaging operations. Outdoor operations are outside the scope of this specification and are not addressed.

1.3 This specification is to be followed by licensed operators in the cannabis/hemp space who move the cured crop(s) into consumer or non-consumer packaging used for distribution.

1.4 Security of the cannabis/hemp flower during the packaging process is not within the scope of this specification.

1.5 This specification is intended to remain valid until the packaged cannabis/hemp flower is placed in storage or transit.

1.6 *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.*

1.7 *This international standard was developed in accordance with internationally recognized principles on standard-*

ization 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:²

D8197 Specification for Maintaining Acceptable Water Activity (a_w) Range (0.55 to 0.65) for Dry Cannabis Flower Intended for Human/Animal Use

D8270 Terminology Relating to Cannabis

3. Terminology

3.1 Definitions:

3.1.1 *General*—Definitions are in accordance with Terminology **D8270**, unless otherwise indicated.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *environmental conditions, n*—the atmosphere immediately surrounding the cannabis/hemp flower as it is transferred from drying/curing to packaging, whether controlled within the immediate vicinity in which the flower is contained, or in the larger space surrounding the packaging operation of the flower.

3.2.2 *mean kinetic temperature, n*—a simplified way of expressing the overall effect of temperature fluctuations during storage or transit of perishable goods.

3.2.2.1 *Discussion*—The MKT is widely used in the pharmaceutical industry. The mean kinetic temperature can be expressed as **(1)**:³

¹ This specification is under the jurisdiction of ASTM Committee **D37** on Cannabis and is the direct responsibility of Subcommittee **D37.04** on Processing and Handling.

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² 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.

³ The boldface numbers in parentheses refer to the list of references at the end of this standard.