

Designation: D8270 - 23b

Standard Terminology Relating to Cannabis¹

This standard is issued under the fixed designation D8270; 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.

1. Scope

- 1.1 This terminology is a compilation of definitions of technical terms used in the cannabis industry. Terms that are generally understood or adequately defined in other readily available sources are not included.
- 1.2 When a term is used in an ASTM document for which Committee D37 is responsible it is included only when judged, after review by Subcommittee D37.91, to be a generally usable term.
- 1.3 Definitions that are identical to those published by other ASTM committees or other standards organizations are identified with the committee number (for example, D20) or with the abbreviation of the name of the organization (for example, IUPAC, International Union of Pure and Applied Chemistry).
- 1.4 A definition is a single sentence with additional information included in discussions.
- 1.5 Definitions are followed by the committee responsible for the standard(s) (for example, [D37.01]) and standard designation(s) in which they are used (for example, D8219).
 - 1.6 Abbreviated Terminology:
- 1.6.1 Abbreviated terminology is intended to provide uniform contractions of terms relating to cannabis that have evolved through widespread common usage. The compilation in this standard has been prepared to avoid the occurrence of more than one abbreviated term for a given cannabis term and to avoid multiple meanings for abbreviated terms.
- 1.6.2 The abbreviated terminology and descriptions in this standard are intended to be consistent with usage in the cannabis industry and the standards under D37 jurisdiction. Other ASTM committees may assign a different word-phrase description to the same abbreviated terminology. In such cases, the abbreviated terms in this standard shall apply to usage in D37 standards, or if widespread misunderstanding could result from conflicting abbreviated terminology descriptions, the abbreviated terminology for the word-phrase shall not be used in D37 standards.
- ¹ This terminology is under the jurisdiction of ASTM Committee D37 on Cannabis and is the direct responsibility of Subcommittee D37.91 on Terminology. Current edition approved May 15, 2023. Published June 2023. Originally approved in 2020. Last previous edition approved in 2023 as D8270 23a. DOI: 10.1520/D8270-23B.

- 1.6.3 Acronyms and Initialisms—A word formed from the letters or parts of words of a longer word-phrase, usually from the initial letters or parts of the words. An acronym is pronounced as a word (for example, radar for radio detection and ranging). An initialism is pronounced as a series of letters (for example, DOT for Department of Transportation).
- 1.6.4 The acronym or initialism description is the origin word-phrase for the acronym or initialism, not a definition.
- 1.7 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.
- 1.8 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:²

D7338 Guide for Assessment Of Fungal Growth in Buildings - b14a-a87c36bc60c5/astm-d8270-23b

E2614 Guide for Evaluation of Cleanroom Disinfectants
F3127 Guide for Validating Cleaning Processes Used During
the Manufacture of Medical Devices

2.2 Other Standards:

AOAC 955.04D Nitrogen (Total) in Fertilizers³

3. Terminology

batch, *n*—a defined quantity of product accumulated under conditions considered uniform for sampling purposes.

batch number, *n*—a group of letters, numbers, or symbols, or any combination thereof, from which the history of the manufacturing, packaging, labeling, or holding of a product or derived product can be determined.

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 Available from AOAC International, 2275 Research Blvd, Ste 300, Rockville, MD 20850, https://www.aoac.org.



Discussion—The terms *batch number*, *lot number*, or *control number* refer to the manufactured/produced unit identified.

- **bioactive**, *adj*—having an effect upon a living organism, tissue, or cell.
- **biocomposite,** *n*—a product formed by two or more materials, one of them being biologically derived and including a binder or resin.
- **biosecurity**, *n*—preventative measures designed to protect crops and property from the entry and spread of pests and diseases
- **cannabinoid(s),** *n*—a class of chemical compounds produced by the cannabis plant.

DISCUSSION—Cannabinoids are synonymous with 'phytocannabinoids' when referring to the cannabinoids produced by the cannabis plant. 'Endocannabinoids' refer to those cannabinoids produced by normal human/animal physiological functions.

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

DISCUSSION—Cannabis is derived from the homogeneous cultivars of the plant *Cannabis sativa L*. (Family Cannabaceae) and its subspecies, varieties, and chemotypes.

- **cannabis, medical,** *n*—cannabis and cannabinoid materials that are produced and used for medicinal purposes in accordance with applicable regulatory standards.
- **cannabis, oil,** *n*—concentrated liquid extracts from the cannabis plant.

DISCUSSION—The term cannabis oil or CBD 'oil' is commonly used to refer to a product or ingredient that actually consists of a concentrated extract of cannabis material (liquid or otherwise) dissolved in some type of fixed oil, such as olive or coconut. There are two types of traditional cannabis oil; fixed oil pressed from the seed, and volatile or essential oil from the glandular trichomes.

certified seed, *n*—seed that meets standards administered by a recognized member of the Association of Official Seed Certifying Agencies (AOSCA) and produced in a way that maintains satisfactory genetic purity and varietal identity.

Discussion—Requirements include genetic stability, percent germination, and agronomic consistency. Certified seed is a subcategory of pedigreed seed in some countries.

- **cleaning,** *v*—physical removal of dirt, debris, and other potential contaminants to the extent necessary for further processing or intended use.
- **component,** *n*—a substance or item intended for use in the manufacture of a product including ingredients, additives, fillers, other ingredients, and processing aids.
- **composition,** *n*—the aggregate mixture which results from the manufacture of a product according to the formula and process defined in the product's manufacturing protocol.
- **contact surface,** *n*—any boundary region that directly touches cannabis, components, or cannabis-derived product, and any boundary region from which drainage onto cannabis, components, or cannabis-derived product, or onto other

- regions that touch cannabis, components, or cannabisderived product, which may occur during the normal course of operations.
- **contact time,** *n*—predetermined time that a test microorganism is exposed to the activity of a test material.
- **contaminant,** *n*—any material that potentially has adverse impacts on the functioning of, and/or shows an undesirable interaction. **F3127**

Discussion—A contaminant may be a single component or any combination of components. Examples of possible types of contaminants includes biological or non-biological in nature; living or dead; particles or thin films; solid, liquid, or gas; organic or inorganic.

- **controlled access area,** *n*—an area in the physical plant, dispensary, or location, designed to prevent entry by anyone except authorized personnel.
- **cultivar,** *n*—a plant variety that has been produced in cultivation by selective breeding.
- **cultivar, commercial (cannabis),** *n—cannabis* that is grown for the purposes of fiber, textiles, biofuels, bio/phytoremediation, or any other purposes not intended for human and/or animal consumption.
- **cultivar, multi-purpose** (**cannabis**), *n*—*cannabis* that is grown for multiple end uses whether that be for a combination of drug, nutritional, and/or commercial purposes.
- **cultivar, nutritional (cannabis),** *n*—*cannabis* that is grown for the purposes of seed production or any other purposes intended for human and/or animal consumption except for the purposes of collecting, isolating or extracting the essential oils, resins, saps, glandular trichomes, and flower(s).
- **cultivar, resin (cannabis),** *n*—*cannabis* that is grown for the purposes of collecting, isolating or extracting the essential oils, resins, saps, glandular trichomes, or flower(s) intended for human and/or animal use.
- **cultivate**, *v*—to grow, harvest, dry, and cure agricultural products.
- **cultivation operation,** *n*—a facility where agricultural products are grown.
- **cultivator,** *n*—a person, group of persons, non-profit entity, or business entity that grows drug, nutritional, and/or commercial products.
- **decontamination,** *n*—the use of physical or chemical means to remove, inactivate or destroy microorganisms on a surface or item so there are no infectious organisms and the surface or item is rendered safe for handling, use, or disposal.
- **dehulled hempseed,** *n*—internal material of the hemp seed.

 DISCUSSION—Dehulled hempseed is synonymous with hempseed heart, hempseed nut, and hulled hempseed.
- **disinfectant,** *n*—a physical or chemical agent or process that destroys pathogenic or potentially pathogenic microorganisms on inanimate surfaces or objects.

dispense, *v*—to provide cannabis or cannabis-derived product to compliant individuals and/or entities.

dispensing operation, *n*—a person, group of persons, non-profit entity, or business entity that provides cannabis or cannabis-derived product to individuals or other entities.

Discussion—A dispensing operation may include delivery services, direct-from-garden operations, growing co-ops, and storefront operations.

disposition, *n*—review and approval or rejection of a batch, lot, or other item by quality control personnel.

drug, *n*—(*A*) articles recognized in the official United States Pharmacopoeia, official Homoeopathic Pharmacopoeia of the United States, or official National Formulary, or any supplement to any of them; and (*B*) articles intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; and (*C*) articles (other than food) intended to affect the structure or any function of the body of man or other animals; and (*D*) articles intended for use as a component of any article specified in clause (*A*), (*B*), or (*C*).

drug substance, botanical, *n*—a product intended for use in diagnosing, curing, mitigating, or treating disease that would meet the definition of a drug under section 201(g)(1)(B) of the FD&C Act and would be subject to regulation as such.

Discussion—A botanical product intended to prevent disease would also generally meet the definition of a drug under section 201(g)(1)(B) and be regulated as a drug. (https://www.fda.gov/downloads/Drugs/Guidances/UCM458484.pdf)

efficacy, *n*—the proven performance of a product established under defined conditions.

extract, *n*—an article with liquid, solid, or semisolid consistency in which the constituents of interest are completely or partially separated from other components with the aid of water, alcohol, alcohol-water mixtures, or other suitable solvents.

extract, commercial, *n*—extraction products that are not explicitly produced for the purposes of inhalation through combustion and/or vaporization.

extract, inhalation, *n*—extraction products that are explicitly produced for the purposes of being absorbed through the lungs with or without combustion or heating (aerosolized mist, smoke, sprays, vapors, or other methods).

extraction, *n*—a process or method for collecting, isolating or removing any substance from a source material, whether bioactive or not.

fungal spore, *n*—general term for a reproductive structure in fungi. **D7338**

Discussion—The spore is the structure that may be used for dissemination and reproduction and may be resistant to adverse environmental conditions.

fungus (s), **fungi** (**pl.**), *n*—eukaryotic, heterotrophic, absorptive organisms that usually develop a rather diffuse, branched, tubular body (network of hyphae), and usually reproduce by means of spores.

Discussion—The terms *mold* and *mildew* are frequently used by laypersons when referring to various fungal colonization.

hazard, n—a biological, chemical, or physical agent or condition with the intrinsic capacity to cause an unwanted or adverse effect.

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.

Discussion—The term hemp is synonymous with industrial hemp.

hemp chaff, *n*—flowers and leaves of seed-bearing hemp plants with most of the seed, stalk, and branch material removed.

Discussion—Can be in fresh, dried, and conditioned forms.

hemp fiber dust, *n*—particulates of fiber, hurd, soil or other plant debris that can become airborne with a small amount of air movement.

DISCUSSION—Dust is not synonymous with trash and can be used as an input to biocomposite products.

hemp fiber purity, *n*—a measure of specific hemp fiber content, excluding other types of fiber, screenings, trash, and dust, calculated in % by weight.

DISCUSSION—The measure of Hemp Bast Purity is the % of hemp bast within a lot, excluding hemp hurd, screenings, trash, and dust.

DISCUSSION—The measure of Hemp Hurd Purity is the % of hemp hurd within a specific lot, excluding hemp bast, screenings, trash, and dust.

hemp fiber screenings, *n*—a byproduct of hemp decortication or refining that contains a mixture of hemp fibers and other material.

hemp fiber trash, *n*—unused pieces of debris and other material remaining after decortication of hemp stalks or further refinement of hemp fiber.

Discussion—Usually disposed with other unused material and is not synonymous with hemp fiber screenings or dust.

hemp seed, *n*—see **hempseed**.

hemp seed oil, *n*—oil derived from hempseed.

DISCUSSION—Low-THC and does not contain added cannabinoids.

hemp straw, *n*—cut hemp stalk that may be baled or otherwise prepared for storage.

Discussion—May also contain seed, weeds, other plant remnants and foreign material.

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

DISCUSSION—Primarily used for sowing to grow a plant or for further processing; this is sometimes known as hemp grain.

hempseed fines, *n*—fragmented fractions of hemp seed derived from dehulling or mechanical cleaning processes.

Discussion—Comprised of broken hemp seed, broken dehulled hemp seed and hemp seed hulls.

hempseed hulls, *n*—pericarp (outer shell) of the whole hemp seed.