CANNABIS COMPLIANCE BOARD STATE OF NEVADA



ccb.nv.gov CARSON CITY OFFICE 3850 Arrowhead Drive, Suite 100 Carson City, Nevada 89706 Main Line: (775) 687-6299

LAS VEGAS OFFICE 700 East Warm Springs Road, Suite 100 Las Vegas, Nevada 89119 JAMES HUMM Executive Director

MICHAEL MILES

Deputy Director

ADRIANA GUZMÁN FRALICK Chair

Update to Shelf-life Bulletin for Cannabis Establishments

Pursuant to NCCR 9.040, the Nevada Cannabis Compliance board is issuing the following updated guidance regarding cannabis product shelf-life and shelf-life testing effective November 15, 2024.

For additional guidance, please email CCB Laboratory Testing at <u>LaboratoryTesting@ccb.nv.gov</u>.

INFUSED PRODUCT	SHELF-LIFE ^{1,2}	INFUSED PRODUCT	SHELF-LIFE ^{1,2}
Chocolate bars	1 year	Caramel	6 months
Brownies	2 months	Pretzels	4 months
Cookies (soft)	2 months	Beverages	1 year
Cookies (crunchy)	4 months	Gummy treats	6 months
Macaroons	2 months	Hard candies	1 year
Cereal treats	6 months	Coffee and tea (ground non-	1 year
		vacuum)	
Granola and granola bars	6 months	Dried fruit	6 months
Syrups	1 year	Popcorn kernels	1 year

Enforcement Bullet Points^{3,4,5,6}

- Producers of edible products may use recommended shelf-life dates provided by the data gathered from federal food safety programs as described above. If producers would like to have a shelf-life longer than the one recommended by federally provided data, they must conduct a shelf-life study through a Nevada cannabis independent testing laboratory. All non-solvent based extracts of cannabis intended for consumption (infused dairy butter, mixtures of extracted products, oils or fats) must undergo a shelf-life study in addition to the compliance testing already required. Items not found in the federal guidelines must undergo a shelf-life study.
- Standard shelf-life studies will be acceptable for infused cooking fats due to their short shelf-life. Accelerated studies will be acceptable for shelf-stable items. The shelf-life studies will examine specifically the growth of microbes over time within the samples, in addition to changes in potency and water activity/pH.
- Maximum shelf-life extension will be limited to one year for all products due to the THC molecule's known ability to degrade by 10% in a year's time. This recommendation is in line with FDA pharmaceutical standards whereby shelf-life is determined when 10% of the active ingredient is lost to degradation.

- Shelf-life study design plans must be submitted by the production facility to the Nevada CCB for review and approval through Accela as an R&D request prior to beginning the shelf-life study. The study plan must be based on ASTM D8309-21 Standard Guide for Stability Testing of Cannabis-Based Products, and must include full product information, study objectives, equipment to be used, amount of product to be sampled, sampling procedures, storage conditions, time points for testing, test methods, instructions for data handling and calculations, acceptance criteria for the results, instructions for documenting and evaluating deviations, and names/dates of personnel approving the study design plan. The production facility may reach out to the laboratory of their choice to obtain the study plan and submit that with the request in Accela. The stress testing, photo degradation, and organoleptic testing portions of ASTM D8309-21 are optional at this time.
- Sufficient product must be collected prior to beginning the study to enable all required testing at all time intervals until completion.
- All shelf-life testing must be performed on the cannabis-infused version of the final product as it is intended to be sold in licensed Nevada cannabis dispensaries.
- Temperature and humidity require continuous monitoring and documenting to ensure no excursions invalidate the study.
- The laboratory has the responsibility to produce the final report and documentation.
- The final shelf-life study report must be submitted by the production facility to the Nevada CCB for review and approval in Accela <u>prior</u> to the facility utilizing the updated expiration date. This final report must include a summary conclusion, tables with all data points, statistics, calculations, and formulas used, raw data from all testing stages including qPCR curves, pictures of culture plates, instrument data, calibration curves, chromatograms, and full quantitation reports. Supporting documentation for all sample preparation, testing, and QA/QC must be provided to the CCB upon request. The production facility may obtain the final report from the laboratory to submit through Accela. Laboratory raw data may be submitted to the CCB via external drive if it is too large to submit through Accela. If the shelf-life report is approved, the CCB will provide an approval letter to the production facility.
- Enforcement bullet points related to the shelf-life testing process are applicable to studies starting on or after November 15, 2024.
- 1. FoodSafety.gov. (2024, October 15). FoodSafety.gov. Retrieved from https://www.foodsafety.gov/
- 2. National Confectioners Association, https://alwaysatreat.com/candy-storage-tips/.
- 3. Fairbairn, J. W., Liebmann, J. A., & Rowan, M. G. (1976). The stability of cannabis and its preparations on storage. *Journal of Pharmacy and Pharmacology*, 28(1), 1-7. doi:10.1111/j.2042-7158.1976.tb04014.x
- 4. ASTM D8309-21 Standard Guide for Stability Testing of Cannabis-Based Products
- 5. FDA Guidance for Industry Q1A(R2) Stability Testing of New Drug Substances and Products, U.S. Department of Health and Human Services. Food and Drug Administration, ICH, Revision 2, November 2003
- 6. American Herbal Products Association (AHPA), Shelf-life Dating of Botanical Supplement Ingredients and Products, Silver Spring, MD, July 2011