Glossary

Common Hemp Intoxicants Terminology

Age-Gating: A regulatory requirement intended to restrict the sale of THC-containing products to individuals 21 and over, typically enforced through government-issued ID verification. In brick-and-mortar settings, this involves physical ID checks. While marijuana products may not be sold online, hemp intoxicants retailers widely market online using basic mechanisms such as a checkbox or birthdate entry. Online, the term is often used to imply robust age controls where few exist.

Artificial Cannabinoid: Refers to any cannabinoid that is chemically manufactured rather than naturally extracted from the cannabis plant. This includes both semi-synthetic cannabinoids (such as Delta-8 THC or HHC made from CBD through chemical conversion) and fully synthetic cannabinoids (such as THC-O or Spice compounds) that are created entirely in a lab and may not exist in nature.

Broad-Spectrum Hemp Product: A hemp-derived product that contains multiple cannabinoids and plant compounds—such as CBD, CBG, and terpenes—but has been processed to remove all detectable THC. It is marketed as offering the benefits of the chemicals in the plant without THC exposure. (See also Full Spectrum)

Conversion: A general term for the chemical modification of one cannabinoid into another, typically to produce psychoactive compounds from non-intoxicating sources like hemp-derived CBD. This includes processes such as isomerization and hydrogenation, which are used to create synthetic cannabinoids like Delta-8 THC, HHC, and others. Conversion is the foundation of the hemp-derived intoxicants market.

Decarboxylation: The chemical process that activates cannabinoids by removing a carboxyl group through heat, converting non-intoxicating compounds like THCa into their psychoactive form, Delta-9 THC. This process occurs naturally when cannabis is smoked, vaped, or cooked, and is essential for producing the intoxicating effects associated with THC products.

"Farm Bill Compliant": A term used to describe hemp-derived intoxicants that the manufacturer claims are de-controlled from the Controlled Substances Act, and which contain THC in amounts up to 0.3% Delta-9 THC by dry weight. While often used to imply full

legal status, the term refers only to compliance with the Farm Bill's definition of hemp, and not to broader federal statutes such as the FDCA or CSA, under which many of these products remain unlawful.

Farm Bill Loophole: Generally refers to confusion surrounding the 2018 Farm Bill that has enabled both synthetic THC and marijuana to be marketed as hemp products.

Full-Spectrum Hemp Product: A hemp-derived product that includes the full range of naturally occurring cannabinoids, including up to 0.3% Delta-9 THC by dry weight (which can be an intoxicating amount), along with terpenes and other plant compounds. Because "full spectrum" can include up to .3% of the weight of the product in THC, it can contain (but doesn't always contain) intoxicating amounts, based on the formulation during manufacture.

Isomerization: A chemical process that rearranges the molecular structure of a compound without changing its atomic composition. In the context of hemp intoxicants, isomerization is commonly used to convert hemp-derived CBD into intoxicating cannabinoids like Delta-8 THC or Delta-10 THC. This process is central to the manufacture of synthetic or semi-synthetic THC products from legal hemp inputs.

"Low-Potency" THC hemp: A hemp intoxicants industry term that is generally used to describe hemp products containing THC. Although described as 'low-potency,' these products often contain 2.5 to 10 mg of THC per serving—comparable to regulated cannabis products and with potential intoxicating effects.

Remediation: The process of chemically or mechanically altering a cannabis or hemp product to remove, reduce, or neutralize unwanted substances—such as pesticides, heavy metals, or excess THC—to bring it into regulatory compliance. In the context of hemp intoxicants, remediation may be used to lower Delta-9 THC levels below the legal threshold or to strip contaminants from converted cannabinoid products.

Seed-to-Sale: A comprehensive regulatory framework that requires licensed cannabis businesses to document and report every stage of a product's lifecycle—from cultivation (seed or clone), through processing and testing, to final retail sale. It is typically enforced through a track-and-trace system and is designed to ensure transparency, prevent diversion, and maintain product integrity. Unlike hemp markets, which often lack such controls, regulated cannabis systems mandate seed-to-sale oversight as a condition of licensure.

Semi-Synthetic Cannabinoid: A cannabinoid that is chemically altered from a naturally occurring compound, typically through conversion of hemp-derived CBD into another form

such as Delta-8 THC, Delta-10 THC, or HHC. These substances do not exist in usable concentrations in the plant and must be manufactured through chemical processing. While derived from natural inputs, the lab-based conversion process raises similar health and safety considerations as fully synthetic formulations.

Synthetic THC: Any form of tetrahydrocannabinol (THC) produced through a chemical process that creates THC from non-intoxicanting chemicals. In this area of regulation, that is typically from hemp-derived CBD. This includes compounds like Delta-8 THC, Delta-10 THC, and HHC. While some argue these are not truly synthetic because they occur in trace amounts in nature, ATACH follows federal interpretation that classifies cannabinoids based on how they are produced, regardless of whether they exist naturally. Under this framework, these chemically converted cannabinoids are variously considered “synthetic,” “semi-synthetic,” or “artificial” and are commonly regulated under the same framework, despite differences in terminology.

THCa Flower: Cannabis flower that contains less than 0.3% Delta-9 THC by dry weight but is rich in tetrahydrocannabinolic acid (THCa), the non-psychoactive precursor to THC. When heated, THCa converts to Delta-9 THC, making these products chemically and functionally equivalent to high-potency marijuana. THCa flower exploits a definitional loophole in federal hemp law, which defines hemp based on the presence of Delta-9 THC. However, federal law also mandates testing for total THC for compliance specifically due to this loophole, and THCa flower simply operates outside USDA requirements.

Total THC: A calculated measure that accounts for both Delta-9 THC and its precursor THCa, which converts to Delta-9 when heated through decarboxylation. It is typically expressed as: Total THC = (THCa × 0.877) + Delta-9 THC. This formula is used in testing and regulation to more accurately reflect a product’s potential intoxicating strength. The Total THC standard has been adopted by the USDA and in stricter state laws to close loopholes in the federal hemp definition, which only limits Delta-9 THC alone.

Track-and-Trace: A regulatory system that monitors the movement of cannabis or hemp products through the supply chain—from cultivation and processing to distribution and retail sale. These systems are designed to ensure product accountability, prevent diversion, and support enforcement and recalls. While mandatory in regulated cannabis markets, most intoxicating hemp products are sold outside any track-and-trace framework, contributing to safety and compliance gaps.

Work-in-Progress Hemp: Intermediate hemp material that temporarily exceeds the 0.3% Delta-9 THC limit during processing when all cannabinoids and other chemicals in the plant

material are concentrated. This material exists in a legal gray area—federally illicit, but unregulated and persisting in a gray area.

List of Common Cannabinoids

Delta-9 THC: The primary intoxicating compound in cannabis. Its concentration (dry weight basis) defines legal hemp vs. marijuana under federal law.

THCa: Tetrahydrocannabinolic acid is a non-psychoactive cannabinoid in raw form that appears in significant quantities in marijuana. THCa converts to delta-9 THC when heated (decarboxylated), which is the form of THC most closely associated with the "high" from marijuana use. THCa is a precursor to delta-9 THC.

Delta-8 THC: Delta-8 tetrahydrocannabinol (Delta-8 THC) is a psychoactive cannabinoid that can be synthesized from cannabidiol (CBD) derived from hemp. D8 is considered to be around 80% as potent as delta-9 THC. While Delta-8 occurs naturally in cannabis in trace amounts, the vast majority of commercial Delta-8 products are created through chemical conversion processes using hemp-derived CBD.

Delta-10 THC: Delta-10 tetrahydrocannabinol (Delta-10 THC) is a low-potency psychoactive cannabinoid produced through chemical conversion of hemp-derived CBD (estimated to have a potency of between 30-60% of delta-9 THC). As with delta-8 THC, it does not occur naturally in meaningful concentrations in the cannabis plant and is considered a synthetic or semi-synthetic compound in commercial contexts.

HHC: Hexahydrocannabinol (HHC) is a hydrogenated derivative of THC that is typically synthesized from hemp-derived CBD. It does not occur naturally in significant amounts and is produced through a chemical process that alters the structure of THC to increase its stability and shelf life.

CBD (Cannabidiol): Non-intoxicating cannabinoid commonly found in hemp. While widely marketed for wellness purposes, CBD is also the primary input for chemical conversion into synthetic THC products.

CBG: Cannabigerol (CBG) is a cannabinoid that serves as a chemical precursor to THC and CBD in the cannabis plant. CBG is considered to be non-intoxicating with wellness-oriented properties. Although clinical research is limited, CBG is typically used in tinctures, capsules,

and topical products aimed at promoting balance and general well-being without intoxication.

CBN: Cannabinol (CBN) is a mildly psychoactive cannabinoid that forms as THC degrades over time, especially when exposed to heat or oxygen. CBN is typically synthesized from hemp-derived CBD for use in consumer products. It is commonly marketed as a sleep aid or relaxation support compound, although clinical research remains limited. CBN is often included in tinctures, gummies, and capsules formulated for nighttime use.

THCP: Tetrahydrocannabiphorol (THCP) is an extremely high-potency cannabinoid that occurs naturally in cannabis in very small quantities. Commercial THCP is synthesized. THCP is very potent compared to delta-9 THC, in that it binds more strongly to CB1 receptors than Delta-9 THC, with estimates between 28x and 30x that of delta-9.

THCV: Tetrahydrocannabivarin (THCV) is a naturally occurring cannabinoid found in trace amounts in some cannabis strains. While structurally similar to THC, THCV has distinct pharmacological effects—at low doses it is non-intoxicating, and at higher doses it may produce mild psychoactive effects. It is typically marketed for appetite suppression, energy, and focus in wellness formulations.