Title A: What Cannabis Entrepreneurs Need to Know About Concentrate Extraction: BHO, Ethanol, and More

Subtitle A: Find out what makes cannabis concentrates different and how they work.

Title B: What Is Cannabis Extract and Which Extraction Method is Best?

Subtitle B: Discover what makes extracts so attractive to cannabis consumers.

Title C: Cannabis Extractions: The Complete Guide

Subtitle C: Learn about the various kinds of cannabis extracts and how they're made.

https://www.pexels.com/photo/420-710-bho-cannabis-529759/

Cannabis dispensaries would be short-selling themselves if they only sold marijuana. As with any agricultural commodity, refined products fulfill a unique role for consumers who are looking for particular experiences.

Cannabis extracts have been around for millenia, starting with the simplest and most commonly known variant: hash. The first description of hash we have today was written in 900 AD by an Abbasid polymath, Ibn Wahshiyya. His advice is not surprising – be careful with your dosage.

This underlines one of the main reasons why veteran consumers consider extracts preferable to dried, cured marijuana. Concentrates contain a more dense collection of cannabinoids and terpenes, leading to a more intense, pleasurable, or medically effective experience.

High-grade marijuana usually contains around 30% THC (Tetrahydrocannabinol, the main psychoactive ingredient) and 24% CBD (Cannabidiol, a non-psychoactive, medicinally useful compound). Extracts, on the other hand, can contain up to 99% of either compound or any of the other 113 cannabinoids present in cannabis.

Because the cannabis plant has such a complex structure, there are different methods for isolating the various compounds it contains. This is why there are so many concentrate types. However, it's not hard to spot the differences between them when you know what to look for.

Cannabis Extraction Methods

Different extraction methods result in different cannabis products. Not only are cannabis consumers interested in particular cannabinoids, but they also value certain concentrates for their flavor content, which varies greatly based on the extraction method used.

Butane Hash Oil (BHO)

Butane Hash Oil used to be a very popular cannabis extraction method. As the oldest of the solvent-based methods commonly used today, it is similar to the hydrocarbon-based extraction processes that food manufacturers use to refine corn oil and canola oil.

The plant matter is exposed to a hydrocarbon solvent (in this case, butane) in particular conditions so that cannabinoid oils seep out of the plant. The butane is then heated in a vacuum chamber until it evaporates, leaving up to 90% pure cannabinoid extract that looks like a honey-colored wax, shatter, or resin ball in the end.

While the BHO process is clean and effective, it involves heating up a highly flammable hydrocarbon

compound, which makes it a risky process for anyone except certified chemical engineers working in purpose-built laboratories. Amateur BHO extraction accidents have led to first responders developing specific emergency procedures to deal with BHO-related explosions.

Rick Simpson Oil

Rick Simpson is notable for using cannabis concentrates as a topical treatment for cancerous growths. His method is simpler and safer than BHO, and it produces a concentrate ideal for oral or topical use.

The Risk Simpson method uses pure naphtha or isopropyl alcohol. These substances naturally draw out a certain set of cannabinoids, including THC, and form a highly concentrated tar-like extract once the solvent evaporates.

The primary advantage to this extraction method is its simplicity. It is safe to perform at home and relatively forgiving when it comes to mistakes and amateur attempts. However, the resulting product cannot be smoked, which is definitely a drawback for most recreational consumers.

Supercritical Fluid Extraction (CO2 Extraction)

People who want to gain BHO-like results without having to worry about flammable gases often opt for the CO2 extraction method. CO2 can operate as an extraction catalyst when it is under enough pressure to become a supercritical fluid.

Because supercritical fluids have both liquid-like and gas-like properties, the method dissolves plant matter in a far more uniform way than other extraction methods. Compared to the butane-based method, it is much safer and easier to control, and it also produces a vape-ready concentrate that contains more aromatic terpenes.

One of the main benefits to this extraction method is that it can produce high-quality concentrate from relatively low-grade cannabis. Because the extraction method itself leaves very little plant matter in the resulting product, you don't have to select the finest quality cannabis to get a respectable extract yield.

The main drawback to CO2 extraction is that it requires additional steps to purify undesired waxes and plant fat compounds from the resulting product. This can involve expensive equipment, making this

extraction method a feasible option for larger operations.

Ethanol Extraction

Ethanol is the compound that makes alcohol intoxicating. It occupies a middle ground between BHO extraction and CO2 extraction. Ethanol is much safer than butane, but it doesn't require the extra equipment that CO2 does as it can extract cannabinoids without having to reach a supercritical fluid state.

Although ethanol extraction is reliable and effective, it is somewhat limited. Only a few types of cannabis products can be produced using this method as ethanol only extracts certain terpenes and cannabinoids – there are desirable cannabis compounds that ethanol doesn't interact with.

However, there is a key area where ethanol extraction outpaces other extraction methods. It is easy and relatively inexpensive to scale. This makes it attractive for enterprise-oriented cannabis refineries that need a predictable, repeatable process that accommodates growth.

https://c1.staticflickr.com/5/4651/39076804295_79785e6411_b.jpg

Rosin Extraction

Rosin extraction has a special place in the world of cannabis because it does not rely on a solvent to extract desired cannabinoids and aromatic oils. Instead, it uses temperature and pressure to impact the moisture level within the cannabis flower itself and allow its internal oils to flow better.

This extraction method is relatively simple, but it requires strictly controlled conditions to achieve commercial-grade results. Temperature, pressure, and humidity must be carefully controlled during every stage of the rosin extraction process.

Rosin typically does not produce concentrate with as high a THC or CBD content as the solvent-based extraction methods it competes with. However, it is an environmentally sustainable extraction method with a relatively low barrier to entry compared to the more expensive solvent systems.

Which Extraction Method Is Best?

As with any commercial chemical process, there is no one-size-fits-all solution for creating high-quality marijuana extracts. There are benefits and drawbacks to each extraction method, and these factors are influenced by the capabilities and infrastructure of the organization investing in extraction technology.

While the BHO method has been around the longest, the safety concerns make it less than desirable for today's extract producers. While the CO2 method is significantly safer, it has a much higher barrier to entry than BHO or ethanol. Rosin extraction isn't quite consistent enough to create uniform products at scale.

In today's dynamic cannabis environment, entrepreneurs are well-advised to place high priority on safety and consistency in order to establish a robust, growth-oriented brand. Ethanol extraction offers an ideal middle ground between the cost-effectiveness of the butane method and the consistency of the CO2 method.

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