

# EXTRACTS EXPLAINED



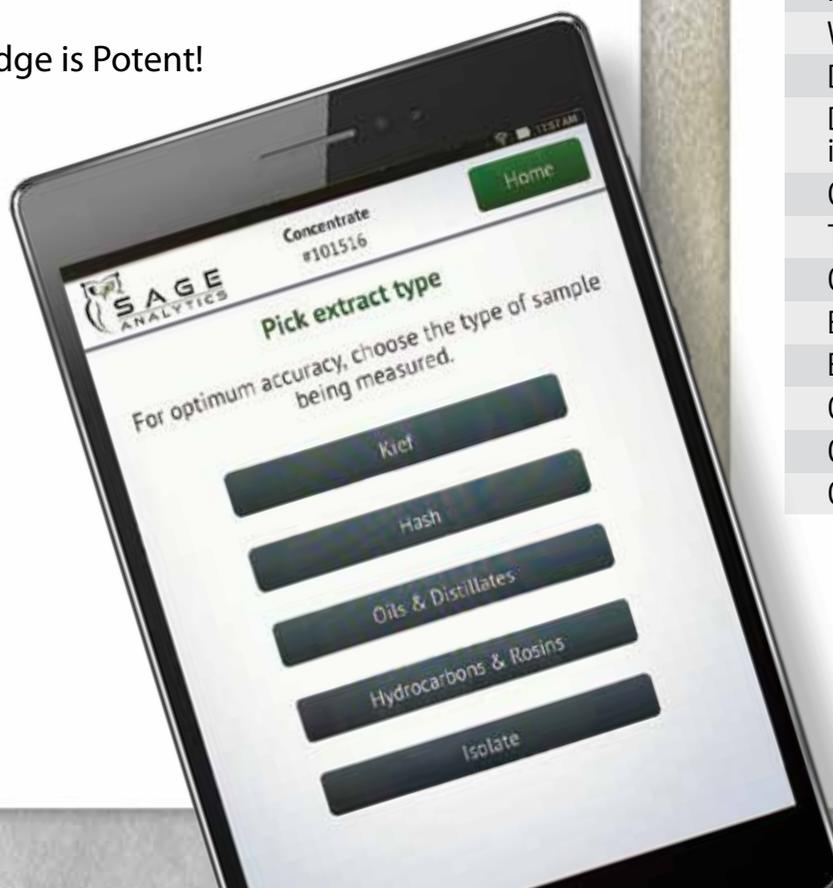
# CANNABIS CONCENTRATES DEMYSTIFIED

The world of cannabis concentrates can be confusing, overwhelming and just plain other worldly. No longer are the days of just taking a bong hit, or smoking a joint, or if you really wanted to get crazy, indulge in some pot brownies.

Nowadays, smoking cannabis has gone a step further and marijuana extract processors and artisans have started creating new types of cannabis concentrates that can be ingested by vaping, dabbing, or twaxing among other methods.

The following guide is going to explain the different types of cannabis concentrates that are out on the market, how they are made, what exactly do you do with them and finally, whether or not the Sage Beacon or Profiler II is able to measure the potency.

Read on because Knowledge is Potent!



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## KIEF

Also known as dry sift or pollen, kief is made up of the resin glands found on the trichomes of cannabis flowers. These glands contain the terpenes and cannabinoids that bring a diversity of flavors and effects to various cannabis strains. Kief is commonly used to make hash, or you can collect kief in a grinder and sprinkle it onto ground cannabis for more potent consumption.



### *How is it made?*

Extracting kief is simple. Using a three-chamber herb grinder will help you finely grind your cannabis while letting kief crystals fall through a screen and collect into a small compartment. Kief is also collected in bulk during trimming after each harvest. Manual sifting of kief through graded screens isolates trichome heads and improves kief purity.

### *What do you do with it?*

- Sprinkle Kief Into a Joint or Roll a Twax Joint (lick the joint and roll the top 1/3 in the kief)
- Make hash
- Make moon rocks
- Press rosin
- Add potency to Cannabutter

### *Typical Potency Range*

THC 20-60%

### *Can the Beacon or Profiler II measure it?*

Yes

## HASH

Hash, also known as Hashish, is one of the oldest players in the cannabis game. It is a concentrate made by compression of the plant's resin. The powdery kief that coats your cannabis flowers can be collected and pressed together to form hash, or solvents like ice water or ethanol may be used to more effectively strip the plant of their cannabinoid-loaded crystals. Though not as potent as BHO and other cannabis concentrates, hash remains a staple of cannabis culture around the world.



### *How is it made?*

Making hash at home today is as easy as purchasing a few inexpensive ingredients from a hardware store. You can even purchase ready-made screens for dry extractions, presses for old school brick hash preparations, or even bags for water extractions all online. To learn how hash is made, click here. (<https://youtu.be/aGm1Ssq9u2s>)

### *What do you do with it?*

- Consume orally as a solid
- Infuse into a beverage such as the traditional Indian drink bhang.
- Smoke, either on its own or as a way to accompany traditional cannabis flowers.
- Vaporize on a hot surface, otherwise known as dabbing.

### *Typical Potency Range*

THC 40+%

### *Can the Beacon or Profiler II measure it?*

Yes

## BUBBLE HASH, ICE WATER HASH, COLD WATER HASH, FULL MELT

The granddaddy of concentrates for the older crowd, bubble hash has begun to wane in popularity as stronger concentrates with more advanced technology take over dispensary shelves. As with butane, CO2 and rosin extraction, making bubble hash involves separating THC from plant matter, but instead of using a solvent like butane or CO2, this process uses ice water.



When purchasing bubble hash or dry sift, it's important to pay attention to the star rating to understand what you're buying. For example, you might come across "6 star bubble hash" and wonder what the six stars stand for. The stars are a purity rating system from 1 to 6, with one being the poorest in quality. Five to six star is what we would call full melt extracts, often used for dabbing. Three to four stars is considered half melt and should be pressed into rosin before dabbing, or added to a blunt or bowl. One to two star hash is better used for cooking.

### *How is it made?*

The most common way to make bubble hash is by putting the marijuana in mesh bags and then filtering a mixture of the plant matter, ice and water through them until a slurry collects at the bottom. After it dries, you have bubble hash.

<https://www.youtube.com/watch?v=IXsfCBogMmw>

### *What do you do with it?*

- Crumble it over a bowl
- Roll it into bars
- Mix it into joints.

### *Typical Potency Range*

THC 40-80%

### *Can the Beacon or Profiler II measure it?*

Yes

## BHO (Butane Hash Oil)

BHO, or butane hash oil, is an extremely potent concentrate popularly consumed for dabbing and other vaporization methods. Cannabinoids are drawn out of the plant through butane extraction, which leaves behind a wax that will either maintain its sticky consistency or harden up, resulting in a crumbly "honeycomb" or a glasslike "shatter." This method was popularized due to the ability to extract some terpenes along with the primary cannabinoids. Always be sure that your oil is lab-tested for purity, as improperly purged BHO may contain traces of butane.



### *How is it made?*

<https://cannabistutorials.com/make-bho-butane-hash-oil/>

### *What do you do with it?*

- Make Shatter
- Make Wax
- Make Crumble
- Vaporize it so you can "do a dab"

### *Typical Potency Range*

THC 60-90%

### *Can the Beacon or Profiler II measure it?*

Yes

## PHO (Propane Hash Oil)

Concentrate derived from a propane-based extraction is referred to as Propane Hash Oil, or PHO for short. Although others are possible, the consistency of PHO is typically budder. The process of propane extraction is very similar to butane extraction, the primary difference is simply swapping butane for propane. Propane extractions run at higher pressures, stripping different ratios of plant waxes and oils than butane which, depending on the strain, can deliver less residuals and higher levels of terpene preservation. Propane has a lower boiling point than butane, which allows for a lower purging temperature for PHO and results in the buddery consistency as opposed to shatter. Note that some extraction companies utilize a blend of propane and butane.



### ***How is it made?***

<https://youtu.be/ugKaUwkG2Yw>

### ***What do you do with it?***

- Make budder
- Make wax
- Make crumble
- Vaporize it so you can "do a dab"

### ***Typical Potency Range***

THC 60-90%

### ***Can the Beacon or Profiler II measure it?***

Yes

## SHATTER, SAP, PULL-N-SNAP

Shatter is the common name for the stable and glass-like concentrates that more than likely will break into many pieces when dropped on a hard surface. Some shatter has some adhesive properties to it, while other kinds will be smooth to the touch. A lot of people try to find shatter because its crystalline nature implies purity. Heat, moisture, and high terpene contents can also affect the texture, turning oils into a runnier substance that resembles sap (hence the commonly used nickname "sap"). Oils with a consistency that falls somewhere between glassy shatter and viscous sap are often referred to as "pull-and-snap."



### ***How is it made?***

<https://www.youtube.com/watch?v=TgjDwFjgVWc>

### ***What do you do with it?***

- Vaporize it so you can "do a dab"

### ***Typical Potency Range***

THC 80-90%

### ***Can the Beacon or Profiler II measure it?***

Yes

## WAX

Cannabis wax refers to the softer, opaque oils that have lost their transparency after extraction. Unlike those of transparent oils, the molecules of cannabis wax crystallize as a result of agitation. Light can't travel through irregular molecular densities, and that refraction leaves us with a solid, non-transparent oil.



Just as transparent oils span the spectrum between shatter and sap, wax can also take on different consistencies based on heat, moisture, and the texture of the oil before it is purged (the process in which residual solvents are removed from the product).

### *How is it made?*

To make wax, marijuana buds are packed into tubes and then blasted with butane. The exposure to butane extracts the hash oil. For the safety of the user, the excess butane must then be evaporated. Lastly, oils are purged with heat. The gooey substance left behind looks like wax, hence the name.

Again, for many reasons, this is not a process you should try at home. Butane gas is highly flammable, and without proper ventilation, a chemical explosion is always a possibility.

<https://youtu.be/zOmu0TEAPG4>

### *What do you do with it?*

- Vaporize it so you can "do a dab"

### *Typical Potency Range*

THC 60-80%

### *Can the Beacon or Profiler II measure it?*

Yes

## BUDDER

Budder, a wax-concentrate variety, is one of the most popular forms of concentrates in Colorado dispensaries right now. Typically extracted with hydrocarbons, budder is made by using a chemical solvent to "blast" through marijuana to extract the THC, which is then "purged" with heat and air pressure to remove the solvent. The same broad process is used to create shatter and crumble wax, but the results are very different.



### *How is it made?*

Budder wax is made when the extracted cannabinoids begin to crystallize after being agitated during the extraction process. By purging it at a higher temperature or whipping it like a batter in the middle or at the end of purging, a shatter-like concentrate can turn into the waxy substance. Delicately but intently whipping the concentrate and maintaining a specific purging process can create beautiful, fluffy varieties of budder, but it doesn't make it more potent.

### *What do you do with it?*

- Vape it
- Dab it or
- Twax it

### *Typical Potency Range*

THC 60-80%

### *Can the Beacon or Profiler II measure it?*

Yes

## CRUMBLE

Crumble wax is made with a procedure very similar to those that create shatter and budder, but the pre-purged oils used for crumble generally have more moisture, a different temperature and a thicker consistency, which help create the wax's crumbling, cheese-like body after the purging process.



### *How is it made?*

A popular way to make wax into crumble is purging for a longer time at a lower heat, which preserves more terpenes and makes for a better-tasting concentrate.

Crumble wax is difficult to handle, so it's often a less desired concentrate than shatter and budder, but it's still the preferred option of many tokers.

<https://www.youtube.com/watch?v=VBgHAoV7srg>

### *What do you do with it?*

Although its loose structure isn't suited for dabbing, like stickier budders and shatters, shaving bits of crumble works well for portable vaporizer coils and topping bowls of flower.

### *Typical Potency Range*

THC 60-90+%

### *Can the Beacon or Profiler II measure it?*

Yes

## LIVE RESIN

Live resin concentrates are made with the same extraction methods as those listed above, but live resin carries more intense, complex smells and flavors than traditional waxes, shatters and oils. Why? Instead of extracting from dried trim or cured buds, live resin is run with plants that are cryogenically frozen right after harvest — preserving oils, cannabinoids and terpenes that are generally lost during the curing and aging processes.



Although it is possible to make live resin with CO2 extraction, most, if not all, varieties that you'll see in dispensaries are run with butane, shatter being the most popular. Live resin's strong flavor profiles give it a higher price tag than other concentrates, so it's a rare treat for most. But pre-filled, live-resin vaporizer cartridges are starting to emerge on the commercial side, so it might become more prevalent in the future.

### *How is it made?*

<https://youtu.be/AQmKxiTlaSQ>

### *What do you do with it?*

Drop it in your vape pen or dab it

### *Typical Potency Range*

THC 60-80% but high terpene content

### *Can the Beacon or Profiler II measure it?*

Yes

## ROSIN

Rosin refers to an extraction process that utilizes a combination of heat and pressure to nearly instantaneously squeeze resinous sap from your initial starting material. The term “rosin” originated as a method of making a product used to lubricate violin bows. With cannabis, this method is incredibly versatile in that it can either be used with flowers or to clean up hash and kief into a full-melt hash oil. The result is a translucent, sappy, and sometimes shatter-like product. If executed correctly, rosin can rival the flavor, potency, and yield of other solvent-based extraction products.



### *How is it made?*

Rosin has quickly risen in popularity on the underground scene because of how easy it is to make. Producing rosin at home only requires some nugs, a hair straightener and parchment paper. The heat and pressure of the hair straightener pushes the resin glands out of the buds onto the paper, leaving pools of THC oil that produce potent dabs.

<https://www.youtube.com/watch?v=SQVogwcVStc>

### *What do you do with it?*

Dab it

### *Typical Potency Range*

THC 50-70%

### *Can the Beacon or Profiler II measure it?*

Yes

## CO2 Oil

Hot on the market is CO2 oil, a concentrate made possible by expensive botanical extractors that use pressure and carbon dioxide to separate plant material. This method, called supercritical fluid extraction, is one of the most effective ways of reducing cannabis to its essential compounds. The amber oil it produces can be vaporized in a variety of ways, one of the most popular being portable vaporizer pens. Among the industry’s best sellers are disposable cartridges containing CO2 oil and a medical-grade solvent like polypropylene glycol, which gives the oil its liquid consistency.



### *How is it made?*

[https://youtu.be/fYMCA\\_Tg\\_vk](https://youtu.be/fYMCA_Tg_vk)

### *What do you do with it?*

Smoke it using a vaporizer pen

### *Typical Potency Range*

THC 25-70% when pure

### *Can the Beacon or Profiler II measure it?*

Yes, but only in the pure form before it’s been cut with PEG or other solvents

## RSO (Rick Simpson Oil) aka Phoenix Tears

In 2003 a man named Rick Simpson treated his skin cancer using a homemade remedy made from cannabis. By soaking the cannabis in pure naphtha or isopropyl alcohol, the therapeutic compounds are drawn out of the plant, leaving behind a tar-like liquid after the solvent fully evaporates. Also known as Phoenix Tears, Rick Simpson Oil (RSO) can be orally administered or applied directly to the skin. Many other businesses now sell their own renditions of the Rick Simpson Oil, some of which are high in THC while others contain only non-psychoactive compounds like CBD.



### **How is it made?**

<https://youtu.be/KZXGH6mYr3Y>

### **What do you do with it?**

- Put it in edibles
- Eat it as is
- Put it in capsules
- Not great for smoking, vaping or dabbing

### **Typical Potency Range**

THC 20-70%

### **Can the Beacon or Profiler II measure it?**

Yes

## WINTERIZED OIL

Winterization is the process of removing all residual, solvents, waxes and fats from the final cannabis product to make a cleaner, absolute version of the product. This is done to create a pure product that is easy on the lungs and safest for consumption.

This process consists of re-dissolving the purged extract in alcohol (i.e. ethanol) and freezing it in order to separate the residual products such as waxes, lipids and residual solvents.

Once you've removed plant lipids/waxes you now have an enriched/purified cannabinoid solution. The biggest benefit to this process is that you now have an extract that will more easily "crystallize," or become a stable product. Whether you choose to perform in-line dewaxing or to perform dewaxing with ethanol, you're well on your way to making high quality extracts if you do either.

Winterization has its disadvantages, and the most important one is that the final product contains fewer terpenes, so it's less flavorful and aromatic than the oils obtained through other methods. On the other hand, the winterized oil is more potent, so if you're looking for a powerful product instead of an oil that smells good, then it's surely a good idea to search for products obtained through this technique.



### **How is it made?**

<https://www.youtube.com/watch?v=mUXTSqwNDoc>

### **What do you do with it?**

Vape or dab

### **Typical Potency Range**

THC 35-75%

### **Can the Beacon or Profiler II measure it?**

Yes

## DISTILLATES

Distillates are made through a process called molecular distillation. Distilling hash requires taking winterized concentrates — butane or CO2 hash oil refined with alcohol or ethanol and then chilled at extreme temperatures — and then distilling them to concentrate the THC further. Commercial extractors use a machine called a “wiped film evaporator,” which takes advantage of the different boiling points in cannabinoids to thermally separate them.

The process is repeated to remove any impurities, such as leftover solvents or lipids, in the concentrate. The result: a clear, odorless concentrate virtually free of solvents. Distillation can take BHO or CO2 oil with a 70 to 85 percent THC potency and refine it to upwards of 95 percent.



### *How is it made?*

Distillates use an extraction process called “short path distillation” sometimes referred to as “molecular separation” that separates and refines molecules and contaminants to create a clean, almost clear concentrate. Other extraction methods don’t produce nearly the same purity level or variety of uses as this technique, making it highly regarded as a “top-shelf” concentrate. The percentage of THC (Tetrahydrocannabinol) and CBD (Cannabidiol) in the distillate depends on the strain of cannabis or hemp trim used in your cannabis extraction process. Your cannabis or hemp trim needs to be turned into winterized BHO (Butane Hash Oil) or winterized CO2 Oil concentrates through an extraction process before you can begin distilling.

### *What do you do with it?*

Dab it.

### *Typical Potency Range*

THC 70-95%

### *Can the Beacon or Profiler II measure it?*

Yes

## CBD ISOLATE

CBD isolate is what it sounds like: the extraction of CBD from the cannabis plant so that the subsequent product is “pure” CBD. Companies that do this use some kind of extraction process, likely CO2. They remove unwanted plant material from the extraction.

To activate that CBD, the extraction will be decarboxylated, or heated so that the acidic form of the cannabinoid (CBDA) will convert to the non-acidic form (CBD). The final product is quite beautiful.

CBD isolate will look like snowy, white crystals.



### *How is it made?*

<https://youtu.be/oa-HfwJCqTg>

### *What do you do with it?*

At this point, the substance can be consumed directly; since it has already been decarbed, it does not need to be smoked, vaped, or dabbed, although you can ingest it this way. It can be added to a drink, infused in cooking, or even applied topically.

### *Typical Potency Range*

CBD 90-99%

### *Can the Beacon or Profiler II measure it?*

Yes

## THC ISOLATE / Crystalline

THCa Crystalline was developed as a means of delivering large, quantifiable doses of THCa and is known as the purest isolate anywhere on the market testing at 99-100%. This pure THCa converts to THC when vaped and creates a clear and highly cerebral effect, or remains non-psychoactive when ingested.



### How is it made?

<https://www.youtube.com/watch?v=v8yjnVcrHBY>

### What do you do with it?

Dab it if you want to get high

Ingest it with food or drink if you don't want the psychoactive "stoned" effect

### Typical Potency Range

THC 90-99%

### Can the Beacon or Profiler II measure it?

Yes

## What products CAN'T be measured by the Beacon or Profiler II?

**Decarboxylated Flower** This is flower that has been heated to convert THCa to delta-9 THC. The process of "decarbing" the bud activates the THC, which is absorbed into our bodies via our cannabinoid receptors, producing that beloved high. However, some extraction methods require decarboxylation of the flower prior to extraction.

**Why can't Sage test for it?** We have not created data models for decarboxylated plant material that is specific to these extraction processes.

**Live Plant Matter** These are flowers that have not yet been harvested and cured.

**Why can't Sage test for it?** It contains too much moisture (up to 60-80%wt/wt), such that the remaining weight of potency is much lower than cured flower. Flower must be cured to an 8-12% range to get the most accurate results.

**Industrial Hemp** Includes Cannabis plants and plant parts, of any variety, that contains 0.3% tetrahydrocannabinol (THC) or less in the leaves and flowering heads.

**Why can't Sage test for it?** Sage can test for material that is above 2% CBD, especially cured hemp flower and several extracts derived from hemp with dominant CBD characteristics. Live hemp, hemp biomass, decarboxylated hemp, and cured hemp trim are often below detection limits for the Luminary, and we have not created data models specific to hemp.

**Vape Oils** which are sometimes also known as "concentrates" — are, essentially, just concentrated cannabis oils. There are a few different processes for producing cannabis oils, but they all work by extracting and straining away the cannabinoids from the cannabis plant using a solvent, whether that be CO2, alcohol, or chemicals. Oils have no plant matter in them; instead, the oils are the extracted resin glands from the cannabis plant.

**Why can't Sage measure it?** Vape oils are usually cut with "thinning agents" or "carrier agents" to make the product easier to vape. The most common ones are:

- Propylene glycol (PG or PPG)
- Vegetable glycerin
- Polyethylene glycol (PEG) 400
- Medium chain triglycerides (MCT oil)

The Beacon or Profiler II doesn't recognize these foreign ingredients, so therefore cannot accurately detect the potency of the cannabis if these other carrier agents have already been introduced into the oil.

If you're getting an error message when you try to test a certain type of oil, it has most likely been cut with one of the agents listed above.

**Any type of Edibles, or Tinctures** Including Canna Butter and Hemp Oil

**Why can't Sage test for it?** It doesn't recognize the other ingredients that have been added to the product (i.e. sugar, butter, oil or other carrier agents) so it will spit out an error message. The device is only designed to recognize pure cannabis flower or concentrate, so the introduction of another ingredient such as oil or butter, will stump the device.

*continued on next page...*

**What products CAN'T be measured *continued***

**Caviar (i.e. Moonrocks)** Caviar goes by a few different names, with moon rocks being the most popular alternative, but they all mean the same general product. Dispensaries take regular buds, infuse them with hash oil, then roll them once more in kief.

**Why can't Sage measure it?** We do not have enough samples of this type of concentrate in our data model to accurately test for it. It is basically a hybrid concentrate utilizing 3 different products (bud, hash oil & kief, which we can accurately test each in of themselves, but when put together the device cannot accurately choose which model to select, therefore will most likely give inaccurate results.

**Terp Sauce / Sauce / Diamonds** Terp sauce, often known as High Terpene Full Spectrum Extract (HTFSE), is a high purity cannabis extract that is extremely high in aromatic terpenes. This potent sauce may contain over 60% more of these smelly molecules than standard shatter or wax products. Purging for terp sauce is done slightly differently and is often dubbed "diamond mining." The gold liquid is placed within a cool and dark place for up to a couple of weeks. During this resting phase, a separation occurs, with Cannabinoid crystals forming within the terpenes. The remainders besides terpenes and cannabinoids are then removed and purged separately using heat.

**Why can't Sage test for it?** The product is inherently inhomogeneous because of the separation process that occurs during the resting phase. Therefore each measurement would be unique, and not representative of the whole sample, unless the sauce was homogenized (in this case, ruined). Therefore, no data models to measure "homogenized sauce" have been made at this time.

## Solvent vs. Solventless Extractions

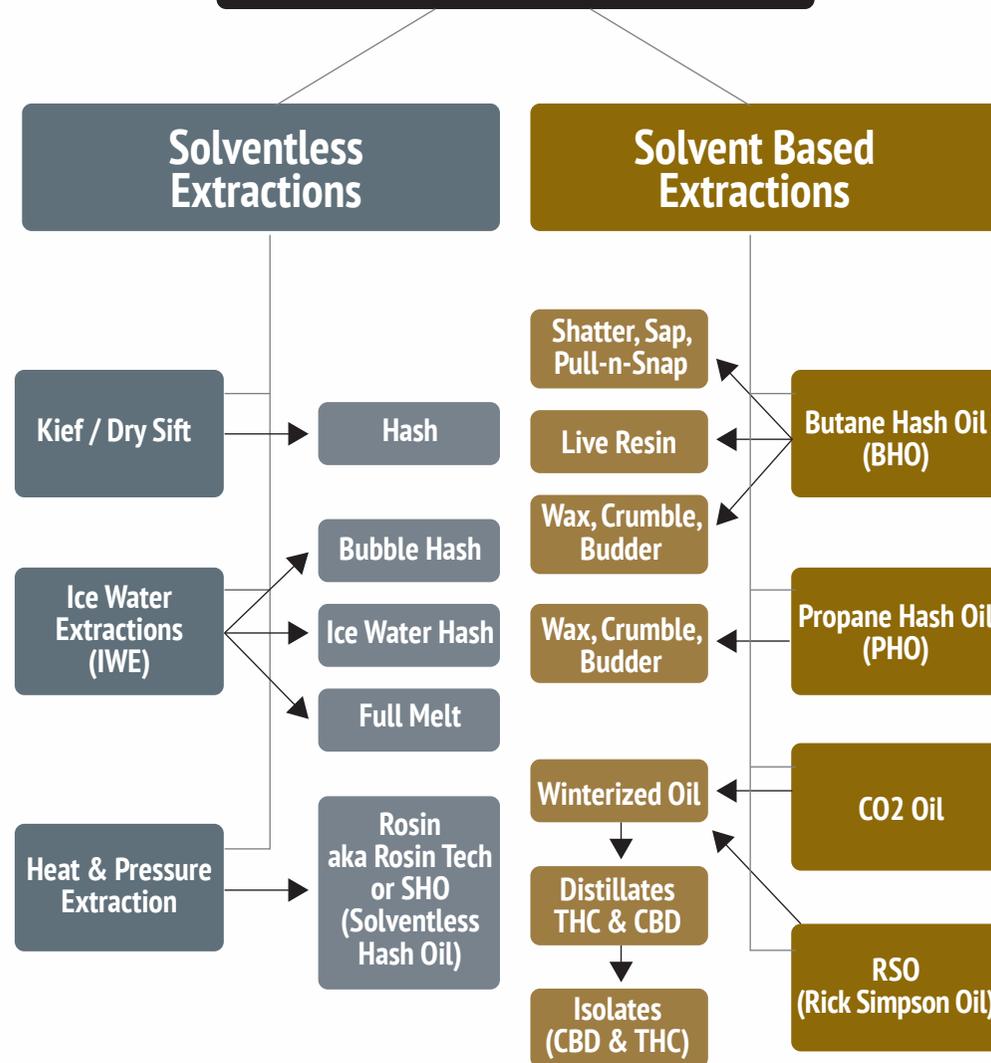
Cannabis concentrates can be divided into two main categories: solvent and solventless extractions. A solvent is a substance that dissolves a solid, resulting in a liquid solution. When we talk about cannabis concentrates, popular solvents include: butane, propane, CO2, and alcohol. Although water is technically a solvent, ice-water extractions are typically classified a non-solvent extractions in the cannabis world. Solventless extractions do not introduce any foreign substances (except for water).

Many people refer to concentrates by their consistency, i.e. shatter, budder or wax. However, the consistency of a concentrate alone does not indicate which extraction technique was used. The same extraction method can deliver a variety of final-product consistencies. The method of extraction and the starting material is far more important than the concentrate's final consistency, as there are several variables that manipulate the consistency; some are in control of the extraction artist, while others are not.

Solvent-based extractions typically produce concentrates that are known as oil. If made properly, this means the concentrate will be free of plant matter (also known as contaminate). These oils will melt and vaporize to nothing – meaning very minimal residue will remain on the nail if dabbed, for instance. The consistency of solvent-based cannabis concentrates varies greatly based on a few factors: strain of cannabis, grow conditions, curing environment, extraction technique, solvent used, purging process and equipment used all play a role in the final product.

It's your responsibility as a thoughtful consumer to inquire from your budtender about the starting material and extraction process used in your favorite concentrate, so you can make the best decision about which concentrate is right for you.

## Cannabis Plant Bud, Trim



# CANNABIS GLOSSARY

## Access Point

A medical access point is an authorized location where patients can find and purchase medical marijuana. It can also be called a pick-up location, and while medication should be fairly easy to obtain, the facility must follow state guidelines so authorization, paperwork, and a store process should be expected. In the medical cannabis community, an access point is often synonymous with a dispensary depending on individual state legislation, guidelines, and lingo.

## Aroma

"Aroma" is a term used to describe the general smell and/or taste of a certain plant or flower. Because consumers' individual definition of aromas (such as "earthy," "skunky," or "citrus") can differ somewhat, aroma descriptions are meant as a basic guideline.

## Backcross (BX)

A backcross is a hybrid plant that has been bred with one of its parents (or a plant that is genetically similar) in order to create offspring that is closer to that of the original parent. For example, a grower could breed a plant with its own father to make sure the baby has its dad's height. This is often done to maintain rarer strains or strengthen those with desired recessive genes.

## BHO

BHO stands for butane hash oil and is a potent concentrate of cannabinoids made by dissolving marijuana in its plant form in a solvent (usually butane). The resulting product has very high THC levels (generally more than flowers or hashish) and is a thick, sticky oil. BHO is also referred to as honey oil, "dabs" or "dabbing," earwax, or shatter, depending on the manufacturing method.

## Bong

A large pipe, usually made of glass, that uses water to diffuse and cool the smoke as you breathe it into your lungs.

## Blunt

Cannabis wrapped in a tobacco leaf cigar or cigarillo paper. The cigar may be hollowed out and then re-rolled with cannabis, and the origin of the name was coined due to the popularity of the brand Phillies Blunt Cigars. Blunts often burn longer than joints and are usually found in larger social gatherings.

## Bubbler

A handheld pipe, usually made of glass, with a water reservoir at the bottom to cool and diffuse the smoke before it is inhaled.

## Bud

Bud refers to the actual flower of the marijuana plant. These are the fluffy parts that are harvested and used for recreational or medicinal purposes as they contain the highest concentrations of active cannabinoids.

## Budtender

This is the attendant working behind the counter at your local dispensary or retail cannabis shop who may be able to answer your questions on strains, cannabis products, and make suggestions based on your needs.

## Cannabinoids

Cannabinoids are the chemical compounds unique to cannabis that act upon the human body's cannabinoid receptors, producing various effects including pain relief and other medically beneficial uses. Marijuana's most well-known cannabinoid is tetrahydrocannabinol (THC) due to the fact that it is the most abundant, and also because it produces the psychoactive effects (or the "high") that drives the plant's recreational use. However, there are over 85 known cannabinoids all with varying effects, so THC isn't the only one.

## Cannabis

Cannabis is a plant genus that produces three species of flowering plants: Cannabis sativa, Cannabis indica, and Cannabis ruderalis. Cannabis sativa and Cannabis indica are used to produce both recreational and medical marijuana. Cannabis ruderalis is rarely farmed due to its natural lower THC content and small stature, but there is some cross-breeding thanks to ruderalis's unique ability to auto-flower rather than mature based on light, so there is potential for this variety to grow in popularity. Cannabis is native to Asia, but grows almost anywhere and has long been cultivated both for the production of hemp and to be used as a drug.

## CBD

CBD is the abbreviation for cannabidiol, one of at least 85 cannabinoids found in cannabis and the second only to THC when it comes to average volume. Recently, CBD has gained support for its use as a medical treatment as research has shown it effectively treats pain, inflammation, and anxiety without the psychoactive effects (the "high" or "stoned" feeling) associated with THC. High CBD strains, such as Harlequin, are being bred more actively and appearing more frequently on the market.

## CO2 Oil

CO2 oil is a cannabis concentrate, made from the Supercritical CO2 extraction process. Supercritical CO2 is a fluid state of carbon dioxide held at or above the critical point of temperature and pressure, which can be used as a solvent in the cannabis extraction process.

## Concentrates

Concentrates are a potent consolidation of cannabinoids that are made by dissolving marijuana in its plant form into a solvent. The resulting product has very high THC levels (generally more than flowers or hashish), and can produce varying products that range from thick sticky oils (BHO) to moldable goo (budder/wax) to resinous bits (shatter). Referred to by a variety of slang terms, the classification of concentrates is often dependent on the manufacturing method and the consistency of the final product.

## Co-op

Co-op is short for cooperative and refers to a community of patients or consumers in a given area who join together to share and receive marijuana. Co-ops usually have specific membership requirements and the product available is generally exclusive to members. In some states, co-ops exist alongside or in lieu of dispensaries.

## Clone

This refers to a clipping from a cannabis plant, which can then be rooted and grown through a cloning process of the mother plant, from which the clone was cut.

## Cross (genetics)

A cross (referring to crossbreeding) is the result when two different plant strains are bred together. For example, Blue Dream is a cross between Blueberry and Haze strains.

## Dab/Dabbing

A dab is a slang term used to refer to a dose of cannabis concentrates "dabbed" onto a redhot surface and inhaled. The act of "dabbing" refers to partaking in dabs.

## Dispensary

Dispensary is a general term used to refer to any location where a patient or consumer can legitimately and safely access cannabis, whether the business is technically an access point, pick-up location, co-op, collective or any other version of a legal cannabis distributor.

## Edibles

Edibles are medicated edible goods that have been infused with cannabis extracts. They are commonly baked goods such as cookies and brownies, but options as varied as flavored drinks, breads, and candies exist as well. Dispensaries also often sell marijuana-infused butters or oils for patients or consumers to make their own edibles. Consuming edibles means the active components from the extracts require longer to take effect as they need to be absorbed through the digestive system.

## Feminized

Feminized plants come from seeds that have been selectively bred to produce only female plants. Since female plants are the ones that produce flowers (which is where most of cannabis' cannabinoids are found), they are the only ones that are used to create marijuana products. Feminized seeds are intended to make things easier for growers by eliminating the need to determine the sex of growing plants and remove males early on to prevent fertilization.

## Flowering Time

Flowering time refers to the time it takes for a plant to produce mature flowers. Cannabis flowering times are affected by the length of daily exposure the plant receives to sun (with the exception of the Cannabis ruderalis species, which flower automatically). When flowering times are reported for a strain, they are general estimates based on how the plants do on average in optimal conditions. Actual flowering times will vary and it is up to the grower to decide when to harvest for maximum benefit.

## Hash/Hash Oil

Hash is short for hashish, which is derived from cannabis plants and can be used for consumption or medication. Production involves the removal of the plant's trichomes by sieving or filtering. Once the cannabinoid-laden powder has been collected, it is typically pressed and ready to be used. Hash ranges in potency, but is generally stronger than straight flowers since everything but the active part of the plant has been removed. A similar concentrated product can also be produced chemically using a solvent; however, this product is commonly referred to as hash oil or "honey oil."

## Heirloom

An heirloom refers to a cannabis strain that was taken from its native homeland and propagated in another geographical location.

## Hybrid

Hybrid refers to a plant that is genetically a cross between one or more separate strains of cannabis. Hybrids can happen unintentionally, but they are usually bred specifically to combine desired traits of the original plants. Most marijuana on the market today is some form of hybrid.

## Hydroponics

Hydroponics refers to a system of gardening that does not use soil. Plants are grown in water and receive their nutrients from the addition of solutions rather than soil. For growers, hydroponic advantages include more control over nutrient intake and stability. In terms of marijuana production, plants grown hydroponically are sometimes said to have cleaner, more distinct flavors.

## Indica

Indica is the less scientific name for the Cannabis indica species of cannabis. Generally these plants originated in the Middle East and Asia and include both of the famous kush and Afghan lineages. Compared to their sativa counterparts, the plants are shorter, bushier and have more compact flower structure. This species tends to produce more relaxing physical effects and can have a sedative quality.

## Inflorescence

Inflorescence is the technical word for the complete flowering, often of unusual flower clusters. This includes cannabis broccoli and cauliflower.

## Kief

Kief is a collected amount of trichomes that have been separated from the rest of the marijuana flower. Since trichomes are the sticky crystals that contain the vast majority of the plant's cannabinoids, kief is known to be extremely potent. Kief is sometimes mistakenly referred to as pollen and is the primary ingredient in hashish production.

## Kush

Kush refers to a line of cannabis plants that hail from the Hindu Kush mountains in Afghanistan and Pakistan. Kush strains are indicas and have a unique aroma that have given them a large fan base. Specific breeds and plants are unique, but their aroma is generally described as "earthy" and often piney combined with citrus or sweet.

## Landrace

A landrace refers to a local variety of cannabis that has adapted to the environment of its geographic location. This accounts for genetic variation between landrace strains, which have been crossbred to produce the cannabis variety we see today. Landrace strains are oftentimes named after their native region, like Afghani, Thai, and Hawaiian, and traces of landraces are sometimes detectable in the names of their crossbred descendants.

## Marijuana

Marijuana is the general term for female cannabis plants or their dried flowers. Females are distinct from male plants in that they are the ones that produce flowers which contain the high percentage of cannabinoids that hold both their medicinal and psychoactive properties.

**OG**

OG is a term that's now used to describe many strains, though the term originated to describe Southern California's Ocean Grown Kush, which was quickly shortened to OG Kush. OG Kush grew quickly in fame and reputation. Most OGs are different variations of the original OG Kush genetics or are also ocean grown on the West Coast.

**Phenotype**

Phenotype is a term that is heard most often in growing. It refers to the genetic expression genes of the plant such as height, color, branching, leaf configuration down to cell structure—any markers that can be used to identify and judge the healthiness of a plant.

**Pistil**

Pistils are part of a female plant's anatomy. On cannabis, it's identified as the little hair-like extensions on the flowers that range in color from white to red to darker orange-brown. When plants are going to be fertilized, the pistil acts to collect the male pollen. When plants are left unfertilized, as in the case of marijuana, the pistils change and can be indicators of plant ripeness.

**Pot**

Pot is a slang term for marijuana.

**Pre-roll**

Pre-roll is a commonly used term that refers to a pre-rolled marijuana cigarette, slangily known as a joint. Many dispensaries have pre-rolls available for purchase.

**Ruderalis**

Ruderalis is a low-THC cannabis variety that is primarily selected by breeders for its CBD-rich genetics. Unlike Cannabis sativa and indica, which use light cycles to flower, ruderalis is an "autoflowering" variety, meaning it flowers with age. Originating in Russia, ruderalis is a hardy plant that can survive harsh climates.

**Sativa**

Sativa is the less scientific name for the cannabis sativa species of cannabis plant. In general, these plants originated outside of the Middle East and Asia and include strains that are from areas such as South America, the Caribbean, Africa, and Thailand. These strains tend to grow taller as plants (usually over 5 feet), are lighter in color and take longer to flower. Many believe that when consumed, sativas tend to produce more cerebral effects as opposed to physical and sedative ones.

**Shatter/Ice**

Shatter or ice are terms used to refer to BHO.

**Strain**

A strain is a specific variety of a plant species. Strains are developed to produce distinct desired traits in the plant and are usually named by their breeders (or by creative consumers). Strain names often reflect the plant's appearance, its promised buzz, or its place of origin. Although the medical marijuana industry strives for consistency, strains can easily be mistakenly or purposely misidentified.

**THC**

THC is an abbreviation for tetrahydrocannabinol. It is the most well-known and most abundantly available cannabinoid in marijuana plants. THC is also the component in marijuana that is responsible for the psychoactive effects, or the "high." Also known as delta-9-tetrahydrocannabinol, it was first isolated in 1964 and is thought to serve as a natural defense for the plant against pests. Research has shown THC to be an effective medical treatment for a range of conditions. There is no known established lethal dose of the compound in its natural form.

**Tincture**

A tincture is a liquid cannabis extract usually made with alcohol or glycerol that is often dosed with a dropper. Tinctures can be flavored and are usually placed under the tongue, where they are absorbed quickly. Effects can be felt within minutes. Tinctures can also be mixed into a drink, but in these cases effects will take longer because the tinctures will be absorbed by the digestive system.

**Topical**

A topical is a type of cannabis product where the active properties of the flowers have been extracted and added to a product such as a lotion or a cream that's applied to the skin. The medicinal properties are absorbed through the skin and can be used to treat muscle aches, long term soreness, or ailments like dry skin.

**Trichome**

Trichomes are the resin production glands of the cannabis plant. In Greek the word means "growth of hair," and while these sticky little protrusions can make plants appear a little hairy, they are not hairs, nor are they "crystals," which is how they are often described. THC, CBD and other cannabinoids are all produced in these glands.

**Vaporizer**

A vaporizer is a device used to consume marijuana. It heats either flowers or marijuana-infused oils to a temperature that produces a cannabinoid-laced vapor to inhale. Many believe vaporizing is healthier than smoking since there is no smoke to ingest, but this method still produces near instant effects. With new, more compact models on the market, vaporizing is growing in popularity.

**Wax**

Wax is another form of concentrate. Commonly produced from hydro carbon extraction.

**Weed**

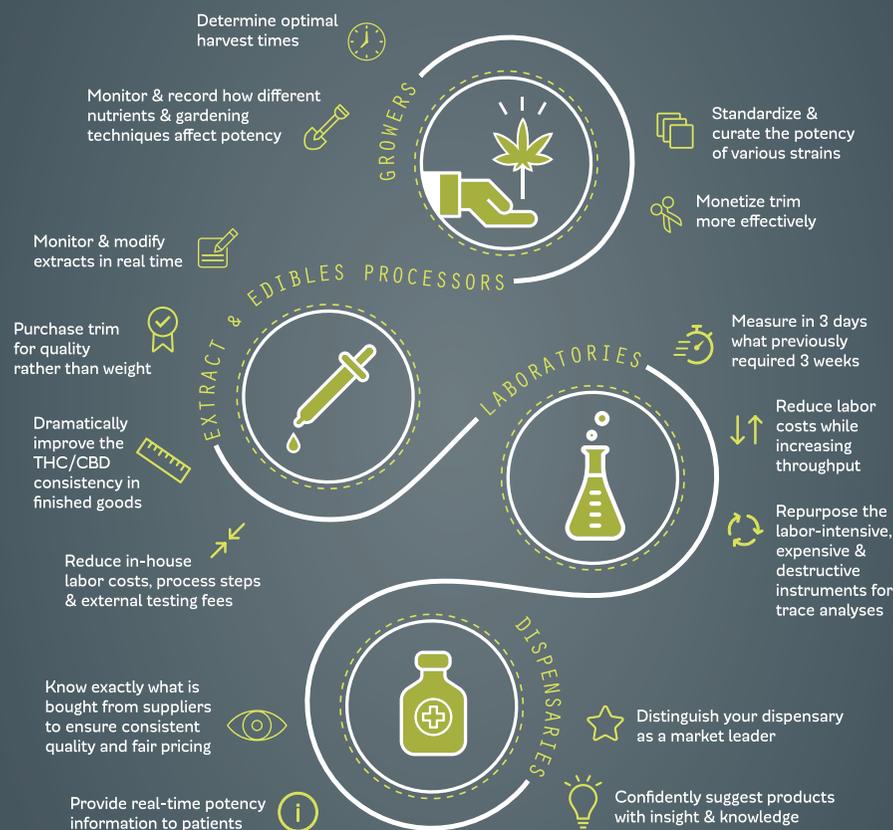
Weed is a slang term for marijuana.

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