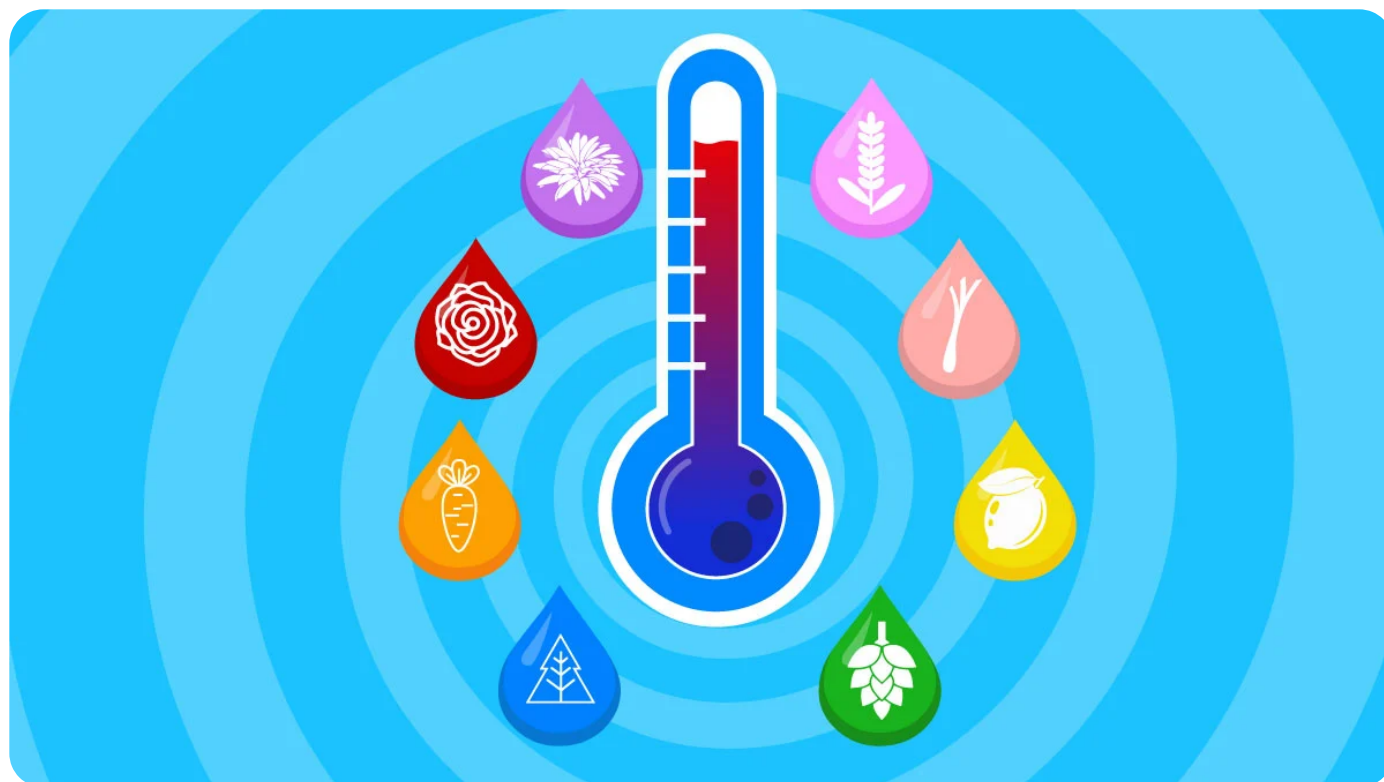


# Terpene Boiling Points (And Why It Matters)



Steven Cargyle



September 13, 2021 | Blog

Terpenes are a potent part of the cannabis plant that provides strains with unique aromas, flavors, and effects.

They also determine how your cannabis tastes and smells.

For example, if you packed a bowl of something super sour and citrusy, you've probably got a limonene-heavy strain on your hands.

Let's take a look at different terpenes, what their boiling points are, and why it matters.

## Common Cannabis Terpenes & Their Boiling Points

Terpene	Boiling Point (Fahrenheit)	Boiling Point (Celsius)	Uses
Linalool	390°F	198°C	Good for cooking, baking, brewing tea

<b>Limonene</b>	349°F	176°C	Good for cooking at low temps
<b>Myrcene</b>	334°F	167°C	Good for vaping and cooking at low temps
<b>Humulene</b>	225°F	107°C	Good for low temperature vaping or brewing tea
<b>Caryophyllene</b>	266°F	130°C	Good for low temperature vaping or brewing tea
<b>Pinene</b>	311°F	155°C	Vaping and brewing tea

## Popular Terpenes & Their Boiling Points

Some of the most common terpenes found in cannabis are myrcene, linalool, limonene, and humulene.

These terpenes all have different aroma and flavor profiles and offer various benefits to a user. They also all have different boiling points.

Let's take a look at the details behind these well-known terpenes below.

### 1. Myrcene

You can easily use this terpene in cooking and vaping with very little waste, as **its boiling point is higher at 334°F**.

Myrcene is sometimes referred to as “mother of all terpenes” and is the most abundant terpene found in cannabis cultivars by far. It gives off an earthy, musk-like aroma and is common in parsley, mangos, basil, lemongrass, and hops.

Myrcene is a viable option to combine with CBD. It also may be helpful for those who are physically active or have a physically demanding job. This common terp is also a good choice for individuals who struggle with sleep.

### 2. Limonene

Limonene is another more hardy terpene that has a high **boiling point at 349°F**.

Limonene can't be mistaken, as it has a bright, sour, citrusy flavor and aroma. It's in many popular cannabis strains, such as Berry White or White Fire OG. This terpene's vibrant lemon aroma and taste make it a good option for infusing into food. Limonene can be found in cannabis, lemons, limes, and oranges.

While research is ongoing, some suggest that limonene may help reduce stress, boost overall health, and help supplement your immune system.

### 3. Linalool

**Linalool has the highest boiling point out of the terpenes listed here, coming in at around 390°F.** This makes it a perfect choice for cooking, vaping, smoking, or brewing tea.

Linalool is common in lavender, bergamot, mint, and rosewood. It has a floral aroma and taste.

This terpene is what makes lavender so popular for relaxation, stress, and sleep — using this before bed may help you rest easier.

### 4. Humulene

**Humulene has a significantly lower boiling point than the other terpenes we've discussed, at only 225°F.** You'll probably want to avoid cooking with it but instead vape it or brew it into tea.

When combined with CBD, humulene offers seriously uplifting and stimulating effects compared to other terpenes. Some people use it when they need to boost their mood or energy levels. Death Star, Candyland, and Sour Kush are all cannabis strains that deliver both.

Humulene was known formerly as alpha-humulene and can also be found in hops, sage, and ginseng.

### 5. Caryophyllene

Caryophyllene has a boiling point of 266°F.

This terpene is one of the only terpenes that bind directly to the endocannabinoid receptors. Through this effect, caryophyllene is thought to boost the effects of cannabinoids directly — including both CBD and THC.

Caryophyllene, sometimes called beta-caryophyllene, has a nice peppery aroma with a mild spicy or warming action.

## 6. Pinene

**The boiling point of pinene is around 311°F.** It makes for a great addition to tea.

Pinene is the primary terpene in pine and spruce trees. There are two main forms — alpha-pinene and beta-pinene — but both have a similar boiling point.

## Why Do Terpene Boiling Points Matter?



Terpenes boiling points matter if you happen to be vaping, smoking, or cooking with terpenes.

Cannabis users and adventurous cooks will want to note the boiling points of each terpene to ensure that the heat doesn't damage the compounds.

Pushing terpenes beyond their comfortable temperatures results in changed flavor and aromas and even reduced therapeutic potential.

Chances are, if you're buying terpenes, you don't want to waste them or the money you spent on them. You'll want to make sure the temperature of whatever you're cooking or vaping doesn't exceed the boiling points of the terpenes you're using.

## 1. Cooking With Terpenes

How does a lavender, honey, and chamomile tart sound? How about charred broccoli with cumin and coriander seeds? These dishes are rich in terpenes, and not only is it sophisticated and delicious, but they can provide you with many benefits.

Cooking with terpenes is an art, mindfully combining blends of flavors and aromas that complement each other, somewhat like chocolate and wine pairing. Terpenes can create bright, vibrant, and complex dishes.

The most important thing to remember when cooking with terpenes is that high temperatures destroy them, so always be patient and cook it low and slow. Your goal is to ensure that the terpenes remain intact through the cooking or baking process, so you still get those unique, special benefits that they have to offer.

## 2. Vaping or Smoking Products That Contain Terpenes

Before smoking or vaping, terpenes are commonly re-applied to dried cannabis or hemp flowers to enhance the flavor and effects. Using terpenes with cannabis or CBD hemp flowers allows the compounds to work in synergy, making the product more effective.

Avid vapers often mix terps into their e-juice to enhance the overall flavor and experience. However, you're going to want to make sure you preserve those valuable terpenes up until the moment you inhale them. When it comes to using terpenes in this fashion, you'll want to have a high-quality vaporizer that features a fully adjustable temperature.

If you're going to use terpenes with your e-juice, you'll want to have a good understanding of the different terpenes available, their effects, and their boiling points, which we will be getting into in just a second.

When it comes to smoking cannabis strains that are rich in terpenes, you'll want to preserve them. One way is to light half or a smaller portion of the bowl instead of torching

the whole thing. This saves some of the terpenes, so you can take advantage of them instead of destroying them on your first rip.

### 3. Making Terpene-Infused Topicals

A common use for terpenes is to make topical products. Many terpenes offer a range of benefits on the skin and add a wonderful bouquet of aromas to lotions, cosmetics, and salves.

The boiling points of terpenes are relevant because many topical products require the use of heat to prepare.

Waxy elements like beeswax need to be heated in order for it to mix with the rest of the ingredients.

You should generally add terpenes during the very last step of the process — right before you're ready to set everything aside to cool.

If you add the terpenes in the beginning and subject them to heat, most of the terpenes are going to boil and evaporate out of the mixture entirely.

Keep an eye on your temperature and add the terpenes when the solution is cool enough that most of the terpene content won't vaporize into the air — thus reducing the potency of the product and wasting your precious terp concentrates.

## Terpenes 101



We've talked a lot about terpenes and their boiling points — but what exactly are terpenes?

Terpenes are hydrocarbons present in many plants, herbs, and spices and are known for their intense aromas and flavors. Each terpene offers a different scent and flavor and provides unique effects.

Terpenes play a specific role in plants. Some terpenes attract pollinators, and in other plants, they're a defense mechanism to ward off unwanted insects and other predators. Terpenes can be helpful for humans as well.

Even though terpenes are in cannabis, they're not psychoactive and are entirely legal. The same goes for CBD, as long as the hemp-derived product contains no more than 0.3% THC.

These complex and unique compounds are a part of our everyday lives. Terpenes are in herbs and spices in the grocery store and essential oils at your favorite bath and body shop. They're in your favorite cup of linalool-rich oolong tea or that comforting fall apple cider made with cloves and cinnamon, both of which possess beta-caryophyllene.

## What Are The Benefits of Terpenes?

Not only are terpenes known for their enticing fragrances and flavors, but certain terpenes have built a reputation for offering some health benefits. Some are known for their ability to induce tranquility, melting away stress. Others may help ease inflammation and pain.

Take nerolidol, for example; this terpene is known for its relaxing and calming effects, making it an excellent candidate for helping you sleep.

## What Is The Entourage Effect?

CBD and terpenes used together can produce something called the “entourage effect,” or synergistic interaction between CBD and other cannabis compounds and terpenes.

If you happen to use cannabidiol already and you’re exploring the idea of introducing terpenes to your daily regime, it may make CBD’s benefits more effective for you.

## How to Store Terpenes Properly

Bear in mind that terpenes are sensitive compounds; they’re affected by heat, air, and light.

When you purchase a terpene product, like a tincture or even flower, be sure to store it properly to preserve those precious terps. You’re going to want to follow this simple rule: CDAC.

You want to keep your terpenes or terpene-heavy hemp flower or marijuana somewhere:

- Cool
- Dark
- Away from moisture
- Clean

You’ll also want to use a glass jar instead of something plastic or metal. Glass is airtight and nonporous, specifically mason jars.

If you’re looking for a way to manage your stress, anxiety, and pain or want a natural way to promote better sleep, terpenes may be right for you.

### References Cited



1. Baron, E. P. (2018). Medicinal properties of cannabinoids, terpenes, and flavonoids in cannabis, and benefits in migraine, headache, and pain: an update on current evidence and cannabis science. *Headache: The Journal of Head and Face Pain*, 58(7), 1139-1186.
2. Ferber, S. G., Namdar, D., Hen-Shoval, D., Eger, G., Koltai, H., Shoval, G., ... & Weller, A. (2020). The “entourage effect”: terpenes coupled with cannabinoids for the treatment of mood disorders and anxiety disorders. *Current Neuropharmacology*, 18(2), 87-96 [1]