DIY E Juice – Ultimate Guide to Mixing Your Own E Liquid

If you’ve been vaping for a while now, you may be craving some new flavors to try with your favorite pieces and equipment. You might find that ordering large batches of your all day vape blend can prove a bit on the expensive side, particularly if your tastes run toward the exotic designer e-liquids priced at over $50 per bottle.

Surely there must be a better way than taking out payday loans to get your hands on that Peanut Butter Crunch-flavored creation you just have to have in your tank?

Fortunately, making homemade e-juice can be a fun and fascinating hobby that has the delightful side effect of saving you loads of cash.

Many people hear “DIY e-juice” and get visions of a mad scientist in a dank lab constantly flirting with explosion by mixing volatile chemicals while laughing insanely.

The reality is that it’s relatively easy to make your own custom e-juice at home, and we’re going to attempt to cover all the facets involved.

Are you interested in making your own e juice? Do you want to be able to create your own unique flavors? In this guide, we will give you everything you need to know to get started with DIY E Juice.
Learn all the supplies you need to have in order to get started, and take a look at other useful tools like a recipes' guide and a look at the best diy e juice calculators. Let's get started, shall we?

What is DIY E juice?

Before we get into the mixing, preparation and all the other fun stuff, it's important to understand the basic ingredients of e-juice if you don't already. After all, you'll be putting this stuff into your body, so we assume you want to have some idea of what exactly it is you're cooking up here.

If you're not even sure what you're reading about in the first place, check out our Ultimate Vaping Glossary of vaping terms and educate yourself a bit before getting started.

DIY E juice is a growing market within the vaping industry. There are tons of great resources on the web to get started, and we're hoping our article will dispel any confusion over the starting process.

DIY E Juice is the process of making homemade e juice by using a PG (propylene glycol) or VG (vegetable glycerin) base, and then adding your own flavorings as well as nicotine juice to create a basic e juice flavor. For more information about PG vs VG e-liquids, visit our PG VS VG page or read on below to find out more.

PG and VG

The majority of prepared e-juices as well as most DIY e-juice recipes call for a mixture of the two ingredients, commonly at a 50/50 ratio but the concentration can vary up to 80/20 and beyond in some preparations.

Each of the two has specific positive and negative aspects as it relates to turning out a quality DIY e-juice, and knowing the properties of both in this context is essential to advancing your craft as a monger of e-juice.

Propylene Glycol

Propylene glycol is a natural compound with a colorless, virtually odorless profile.

It is federally approved for use in food and drugs, and is a core component in many manufacturing processes in the food, tobacco and pharmaceutical industries as well as having an array of other applications.

PG is the more popular base for DIY e-juice recipes calling for mixtures other than a 50/50 blend because it is a thinner, less viscous liquid; therefore it is easier to handle when filling tanks and less likely to leave buildup in your vaping system over time.

It also absorbs into wicking structures faster, so PG-heavy DIY e-liquid flavors doesn't need to settle into a tank quite as long before you can start vaping. PG also has the enhanced throat hit on inhale as well as thinner clouds of vapor juices made with it tend to produce, as some vapers find it just right while others prefer a different experience.

Vegetable Glycerin

As the name suggests, vegetable glycerin is a natural liquid plant oil extract.
It is usually a clear, odorless and mostly colorless liquid that has a mildly sweet flavor and viscous profile.

Vegetable glycerin is approved as safe for human consumption by the FDA, and is commonly used as an ingredient in food production, cosmetics and of course, e-juice.

VG is less “harsh” than PG, and provides a lighter throat hit for those vapers who prefer it. Due to its thickness, VG also takes a bit longer to fully heat into vapor and demands more power from vapor deliver devices at higher concentrations, and is known for the excess residue it leaves behind on equipment as well.

The strengths and weaknesses of each ingredient are optimized for flavor when blended together, which is why most common e-juice recipes will call for at least some of each.

For more information on PG vs VG, check out our article:

Nicotine Juice

If you’re one of the many converts from analog smoking to the world of vaping, you’re familiar with this ingredient, but not as familiar as you may think when dealing with homemade e-juice.

Everyone and their chain-smoking grandmother knows that nicotine is the stuff that made cigarettes worth lighting up in the first place, but not as many people know that undiluted, liquid nicotine is a poison.

No, not the “you should quit smoking, those things are bad for you” type of poison, more of the “call the Emergency Control Center” type of poison. The following can happen if you get nic juice on your skin:

- acute sickness
- death or permanent blindness (if you get it in your eyes)

Handling Nicotine Safely

Nicotine should ALWAYS be kept in a secure location away from children and pets. No, the top of the fridge is not good enough.

If possible, put both the nicotine itself and any tools you use to handle it such as eye droppers or measuring vessels under lock and key to protect others.

Secondly, liquid nicotine should ALWAYS be diluted before use.

ALWAYS use the proper safety equipment when handling liquid nicotine to reduce your risk of exposure, and if any gets on your skin or clothing, be sure to wash it immediately.
Nicotine Levels

Concentration of nicotine is an important factor in DIY e-juice, as it can greatly affect the flavor and overall experience of using homemade e-juice.

The most common nicotine concentrations are **12 mg and 18mg**, but the range of safe levels can reach all the way up to **36mg** and down to the safest possible level, zero.

<table>
<thead>
<tr>
<th>Regular Cigarette</th>
<th>E-liquid Nicotine</th>
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<tbody>
<tr>
<td>Unfiltered, very strong</td>
<td>Super High</td>
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<tr>
<td>Full Flavored, Strong</td>
<td>Extra High</td>
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<tr>
<td>Regular (most)</td>
<td>High</td>
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<tr>
<td>Light</td>
<td>Med</td>
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<tr>
<td>Ultra-light</td>
<td>Low</td>
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<tr>
<td>Freedom from Nicotine!</td>
<td>No Nicotine</td>
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**Achieving the right nicotine level** for you is a matter of careful attention to ingredient balance...and likely a reliable DIY e-juice calculator.

Knowing that certain items are dangerous is essential to handling these hazards. Please be aware of our following notice.

**Notice**

Anyone attempting to follow the advice in this article are doing so at their own risk. We here at www.bestclearomizer.com cannot be held responsible for any individuals causing injury or even death to themselves or others from the use, misuse or malfunction of the e-liquid (e-juice) calculators or information contained on this web site.

Because we are dealing with nicotine liquid that will be used in creating e juice, please be aware that the active ingredients can be very dangerous and in extreme cases, fatal. We are talking about learning what to do, and to do it correctly. We have found this amazing resource for correctly handling nicotine juice (for dummies) done by Xeno over at www.vapersforum.com. Below is an excerpt from the article:

- If you have children or pets keep your liquid somewhere where they cannot get a hold of it. On top of the refrigerator IS NOT a good place. Any 2-3 year old with any climbing skills can get up there. LOCK IT UP!
- DO NOT attempt to vape high concentrations of nicotine liquid. The liquid is meant to be cut down!!
- When handling nicotine juice wear protective clothing (rubber gloves, goggles/face shield, apron). You CAN go blind if it gets in your eyes. It is fatal if you get it on you.
- Be mindful of the pipets/syringes and other tools you may use for mixing. The nicotine residue on these tools would probably be enough to at the very least get a small child or pet really sick.
- If you happen to get uncut nicotine juice on you. IMMEDIATELY wash the affected area thoroughly. Don't wait until you are done mixing... GET YOUR SELF UP AND WASH IT OFF!! If it gets on your clothes, IMMEDIATELY remove the clothing, and get it washed off of you!
- Use common sense

http://www.bestclearomizer.com/ultimate-guide-to-diy-e-juice/
These are the paraphrased words by Xeno on VapersForum.com. We really liked the fact that he stresses how important it is to be SAFE when handling everything. Bravo Xeno, Bravo.

Read on for our comprehensive list of all the supplies you’ll need and why!

DIY E Juice Supplies

We have put together a comprehensive list of all of the supplies you will need to safely create your own diy e liquids. We have put them into separate categories, all equally important:

Safety supplies

**Rubber gloves** are essential to have when you are creating your own e juice concoctions. It helps keep your hands safe from Nicotine juice. This isn't a recommendation, it's a **safety requirement** that we want to make sure you understand.

Next on the list of required gear for DIY E-Juice is **Safety Goggles**. These will also be protecting your eyeballs from possibly getting nicotine juice in your eyes, which CAN cause blindness. We only recommend you mixing your own juices with nic juice if you have safety goggles on.

So you don't go ruining your clothes, be sure to grab a box of **Safety Aprons** as well if you're going to be working with all the different juices for mixing. The Aprons are Polyethylene and are considered safe to use if you happen to get juice spilled on them.

DIY E-Juice Storage Options

When it comes to storing your DIY E-juice, you will find that **Mt. Baker Vapor** does a great job supplying a ton of vapers all the necessary tools and equipment you'll need.

Let’s start with the options of bottle sizes they offer:

- **15 ml Eyedropper Child-proof caps**- Comes with bottle, top cap, removable drip tip.
- **30 ml Eyedropper Child-proof caps**- Comes with bottle, top cap, removable drip tip.

When choosing to buy unflavored ejuice in bulk, MBV is one of the most reliable places you can go to. Whether you need alot of nicotine for your juice or max VG, you will be taken care of.
Here's a list of their options when you choose to use MBV unflavored e-juice:

**Nicotine Strength:** 0 mg – 36 mg

**Blend:** PG 100% – Max VG%

Next on the list is the **blunt needle tips for dropper bottles.**

This is used as an “adapter” piece so you will no longer have to use a syringe.

You just attach the needle tip to the the top of your e-juice bottle and fill away!

Once you've started a collection of your own e juice, you're going to want to remember all the different flavors you've created. Having a nice label to sticker on your bottle is a good start. I've linked a good company that can take care of that for you.

**DIY E-Juice Flavoring**

Finally, the crux of customization, the flavor of your DIY e-juice. DIY e-juice flavorings are all over the Internet, and the selection of flavor bases alone is staggering before even imagining the combinations thereof.

From traditional cigarette and cigar bases to flavors inspired by fruit, candy and other sweet (and savory!) treats; there's a starting point out there for anyone who owns vaping equipment, and the possibilities are endless from there.

Besides all the safety equipment and bottle storage, you'll also need electronic cigarette flavoring. There are tons of options to choose from, across tons of different websites. Here is a list of some of the flavorings from Mt. Baker Vapor:

One of the more popular electronic cigarette flavorings are **Menthol.** Menthol is a great basic flavoring as you're starting out with diy e juice. It always leaves you with that minty taste.

If you are looking for that sour candy e juice taste, than check out **MBV's Sour Flavoring.** It adds that extra “pazzazz” you were looking for! It can also be used to bring out some of the flavors in your e juice concoctions.

If you're looking for an extreme minty flavor, than **Extreme Ice Flavoring** comes off as smooth and cool. This is yet another one of the better mint flavors that you can add to your diy mixes.

http://www.bestclearomizer.com/ultimate-guide-to-diy-e-juice/
Want a refreshing taste of mint with a little bit of cucumber? Try out the popular **Cucumber Mint Flavoring** in your mix to give it a little taste of summer!

**Everybody Loves Math**

Getting the proportions you want to deliver the final product you had in mind is the hardest part of the entire exercise. Finding the correct mix is just a matter of looking at the recipe and determining how much nicotine should be added based on the desired strength of the blend.

*For example:*

15ml of *unflavored* 36mg nicotine + “DIY e-juice recipe” = 30ml juice yield w/ standard nic level of 18mg

There are amazing **online e-juice proportion calculators** that tell you exactly how much of everything to add to get the right recipe.

DIY e-juice calculators are easily found with about 30 seconds worth of Internet research, and there are even a number of smartphone apps that perform this function, so there’s really no excuse to shy away from making your own e-juice because of the math involved.

**DIY E Juice Calculator**

If you are serious about making your own e juice, then you will need to have a good diy e juice calculator. Read on to find out what the best diy e juice calculators for you are!

*http://ejuice.breaktru.com/*

One of the best diy e juice calculators out there. The calculator includes an option to include nicotine strength, and the amount of PG or VG in your base. It also lets you add your own slots to account for multiple flavoring categories.

*http://www.todmuller.com/ejuice/ejuice.php*

Another very popular diy calculator is the ejuice recipe calculator over at *todmuller.com*. You can input data like your target nicotine level in mg/ml. Also your overall amount you would like to create. The calculator also features a *water added* percentage stat as well as a *flavor percentage* stat.

It then outputs the e juice recipe for your diy eliquid you’ve just created. It is a great way to **keep track of your ejuice recipes.**

*http://www.e-liquid-recipes.com/create*

E liquid recipes allows you to instantly plug in all the information you need to create your very own e juice recipes. From the amount of ml to make, to your desired pg/vg ratio. There is also a notes section where you can everything relevant to your recipes including the flavoring you add, etc.

**Sample Recipes**

If you can both read and follow directions, you now know how to use an e-juice recipe to make e-juice, but
do you know any recipes?

It's okay. We're not in the habit of stranding folks with useless knowledge gained from half a lesson, so here are a few sample e-juice recipes to tide you over until you can get to Google:

Scout Mint

The minty chocolate cookies that inspire this flavor have never been thinner than in this DIY e-juice recipe that delivers all the flavor of the famous treat:

**Recipe (for a 30ml batch):**
- 50/50 blend of PG and VG
- Up to 0.1 ml each of chocolate and menthol flavoring
- Up to 3ml of peppermint flavoring

Creamsicle

This classic combination of creamy vanilla and zesty orange has proved addictive summer after summer, and this e-juice flavor captures the essence of the frozen delight.

**Recipe (for a 30ml batch):**
- 60/40 PG-dominant mixture ratio
- 2.8ml of orange flavoring
- 2ml of vanilla flavoring

Ultimate German Chocolate Cake

It's your favorite. You can smell the chocolate with a hint of hazelnut and Jamaican Rum. Let's get the low down of the Ultimate German Chocolate Cake

**Recipe (for a 30ml batch):**
- 50/50 PG/VG base
- Add 0.3 ml each of cocoa, coconut, espresso and Irish cream flavoring
- Add .15ml of hazelnut and Jamaican rum flavoring

If you're tired of the same old flavors, want to save a little money or even just want to try your hand at something new, why not make your own e-juice? Homemade e-juice allows you to create your own personalized flavors as well as customize the other characteristics of the juice such as throat hit and vapor density, so once you master the basics of e-juice making, you may never buy another bottle again.

**What About Alcohol?**

http://www.bestclearomizer.com/ultimate-guide-to-diy-e-juice/
Some DIY e-juice recipe sources advocate the use of alcohol to thin out PG-heavy mixtures as well as provide a bigger throat hit with its characteristic burn. While we can attest to both of these properties with alcohol in e-juice and some juicemakers even use a small amount in the production of their liquids, we can’t specifically endorse the safety of using alcohol in DIY e-juice making.

Alcohol can even affect the taste of an e-liquid in much the same way it does a nonalcoholic beverage, and while this effect is barely noticeable or even desirable with some blends; it can ruin the taste of some flavors.

Vapers sensitive to this issue often leave their store-bought bottles open for a time to allow any alcohol in the mixture to evaporate. Overall, our official opinion is that alcohol is best enjoyed before or after a puff, not during.

Mixing Your Juice

When you finally have all your DIY e-juice ingredients and tools ready, it's showtime. The actual process of creating the e-juice is a bit anticlimactic after all that preparation.

Check List:

- Put on your safety goggles, safety apron and rubber gloves.
- Use the eyedropper to transfer the appropriate amounts of PG, VG and nicotine into your empty 15ml DIY bottle or 30ml DIY bottle.
- Measure the ingredients as exactly as possible to get it just right, then give the whole thing a nice shake.

When all the main ingredients are in the bottle, you officially have e-juice (well, unflavored e-juice, that is).

Unless you are particularly fond of the subtle nuances of palm oil, you'll likely want to add some DIY e-juice flavoring at this point.

However, a common mistake with first time juicers is over flavoring, which both wastes e-juice flavoring and could make the finished product unpalatable.

For best results, flavorings should be added just a few drops at a time and adjusted upward as necessary. See how far a single drop will take you and go from there. You might be surprised at just how little you need.

When everything's in the bottle, give it another good hard shake to combine the ingredients and it'll be ready to use as soon as your patience runs out.

Oh, and be sure to write down the exact ingredients and proportions of any successful blend you create on an index card and keep it in a safe place too...nothing like forgetting the exact recipe for a hit flavor you invented.

If you’re already writing your concoctions down or want to share your DIY ejuice recipes, there’s a website for that.

My Liquid ID
MyLiquidID.com is a great place to create, share and browse other vaper’s e juice creations. Not only are you able to create your own ejuice, you can than order that e juice and have it shipped straight to you!

What?! This isn’t what I mixed!

Is what you just created not exactly what you were expecting? You may want to give it some time before completely giving up on your baby.

Some combinations, particularly those involving complex blends or somewhat unusual flavors, can take a while to properly blend with the other ingredients and make their expected contributions to the flavor profile.

To allow your mix to properly blend with the other ingredients, you can “steep” your e-liquids, allowing the flavors to “come out”. Check out our article below for more information on steeping:

That’s why we always suggest giving a new blend at least a week to see if anything develops. It might still taste like caramel pine needles in 7 days, but at least you’ll know for sure you can throw that one out of the playbook.