

# Shortfill E-Liquids: An Introduction

If you've been vaping for a while, chances are that you have at least a passing familiarity with some of the laws that govern the vaping industry in the UK. When vaping was still relatively new, the European Union adopted a set of regulations collectively called the Tobacco Products Directive (TPD). The TPD sets certain limits for vaping products to help reduce the addictive potential of e-cigarettes and minimise the possibility of accidental nicotine poisoning. For those who vape, these are the three primary limits imposed by the TPD:

- No e-liquid with nicotine can have a strength higher than 20 mg/ml.
- No e-liquid with nicotine can come in a bottle larger than 10 ml.
- No vape tank can have a capacity greater than 2 ml.

Although the UK is no longer part of the EU, the TPD has remained in force here because drafting new legislation for the vaping industry simply hasn't been a priority in the face of so many other world events. You're probably well accustomed to buying your e-liquid in 10 ml bottles at this point, and you're probably aware that the bottle size limitation imposed by the TPD is the reason for that.

Why, then, are so many vape shops now carrying larger bottles of e-liquid along with separate products called [nicotine shots](#)?

In this article, you're going to learn about a new type of e-liquid package that has the potential to make things a great deal more convenient for you by eliminating the massive quantities of small e-liquid bottles that you probably buy every week. That new product is called shortfill e-liquid.

Let's dig in!



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## What Is Shortfill E-Liquid?

As we just mentioned above, one of the key limitations imposed by the TPD has to do with e-liquid bottle sizes. Any e-liquid *with nicotine* must be sold in bottles no larger than 10 ml. That limitation, however, doesn't apply to e-liquid *without* nicotine, which can legally be sold in bottles of all sizes.

If you're a vaper who uses a large vape mod with a glass sub-ohm tank, you probably find the bottle size limitation fairly inconvenient because a powerful vaping device works best with low-nicotine e-liquids. When the TPD was first enacted, most vapers used tiny vape pens with plastic clearomizers. It was common for people to use e-liquids with nicotine strengths as high as 18 mg/ml. With a sub-ohm mod, though, the most popular nicotine strength is just 3 mg/ml. Today's vape mods generate such enormous vapour clouds that a 10 ml bottle of e-liquid may not be large enough for even a single day of vaping. If you buy your e-liquid in 10 ml bottles, in fact, you may have to bring more than one bottle of vape juice with you when you leave the house to ensure that you won't run out.

Shortfill e-liquid is a large bottle of e-liquid without nicotine. Since the e-liquid has no nicotine, the 10 ml bottle size limit doesn't apply. The bottle has at least 10 ml of empty space, though, enabling you to add your own flavourless nicotine before using the e-liquid. A 10 ml bottle of flavourless nicotine intended for use with shortfill e-liquid is called a nicotine shot. Vape shops that sell shortfill e-liquid also sell nicotine shots. You'll buy the products separately and mix them yourself.

Shortfill e-liquid can make life drastically more convenient for you if you're a user of a sub-ohm vaping device because it can allow you to use the same bottle of e-liquid for several days instead of draining one or more small bottles of vape juice each day. Shortfill e-liquid also makes it possible for you to leave the house and bring just one bottle of e-liquid with you without fearing that you're going to run out in the middle of the day. Although it's an imperfect solution compared to e-liquid with the nicotine already mixed in, it's a lot better than buying dozens of tiny bottles each time you stock up on vape juice.

## How to Use Shortfill E-Liquid

Once you get used to it, you'll find that shortfill e-liquid is extremely easy to use. Since 3 mg/ml is the most popular strength among owners of sub-ohm vaping devices, we'll assume that's your preferred nicotine strength as well. With that in mind, these are the three things that you need to know about shortfill vape juice.

- The usual bottle capacities for shortfill vape juice are 60 and 120 ml. Sometimes, companies label those products "50 ml" and "100 ml" because that's the amount of e-liquid in the bottle. For every 50 ml of e-liquid, a shortfill bottle has 10 ml of empty space.
- A nicotine shot contains 10 ml of flavourless e-liquid and usually has a nicotine strength of 18 mg/ml. Adding nicotine shot(s) to shortfill e-liquid gives you a final nicotine strength of 3 mg/ml for the whole bottle.
- A 60 ml bottle of shortfill e-liquid has room for one nicotine shot; a 120 ml bottle needs two shots.

To fill a bottle of shortfill e-liquid, you'll need to pry off the nozzle – a fingernail under the rim of the nozzle is usually sufficient for this – and add the full contents of one or two nicotine shots to the bottle. Remember; you'll need to

use one nicotine shot for a 60 ml bottle and two shots for a 120 ml bottle. After adding the nicotine shots, replace the bottle's nozzle and close the cap tightly. Shake the bottle well before using it to fill your tank.

When you use shortfill e-liquid, the one thing to keep in mind is that the nicotine can potentially separate out of the solution if the bottle sits around for a while. When e-liquid is produced commercially, the manufacturers use industrial mixing machines that are a bit like the machines that mix paints. The machines shake the mixtures so much that it's virtually impossible for them to separate. You can't do the same with arm power alone, though, so it's a good idea to shake a bottle of shortfill e-liquid each time you refill your tank.