NiKiTest – eLiquid Test Kit

These are the offline, detailed and printer friendly instructions on using our eLiquid Test Kit. We **highly** and **strongly** recommend using the online version found below. Load the website on your smart phone/tablet if a computer is not accessible in your testing area.

http://www.nikitest.com/nicotine-test-kit-instructions/

The online instructions include illustrations, color diagrams and a link to a calculator that has been formulated to calculate Nicotine Content.

There are 10 steps in total. Please review all of the 10 steps prior to doing the actual test.

You will need Distilled Water and a white cup (or a medium to place the results in, with white copy paper underneath). This Nicotine Test Kit and instructions will get you on your way to determining the Nicotine Strength of your eLiquid.

Limitations

This kit works very well on most eliquids. The most consistent results come from clear/transparant eLiquid. But most colored eLiquids can still be tested.

The Test Solution has been optimized to work with higher nicotine concentrations, such as 24MG/ML or higher. The test solution will still work with lower concentrations, such as 3MG/ML. However, during the test, 3-5 drops of Bromothymol Blue (not included in this kit but can be ordered separately) will need to be added just prior to adding the test solution.

There are two types of eLiquids that may produce inaccurate results or no changes in color during the testing stages, hence, also inaccurate results.

Caveat 1. eLiquids that are so dark that when held up to a light, that little to no light passes through. Basically, unclear or opaque eLiquids. Colored eLiquids are fine. We have tested a ton of colored eLiquids with accurate results. Its the very dark opaque eLiquids that have issues.

The results of the test on such eLiquid's is that the Test Solution may not bring out the color that you are seeking out of the test (**blue**, **green**, **yellow** transitions) because the eLiquid started out with such a deep color.

You will know very early on if the test will yield accurate results (step 6) if the eLiquid and distiilled water turns **blue-ish** after adding the couple drops of pH Indicator and swirling.
If it doesnt turn **blue-ish**, the test probably wont work.

Caveat 2: eLiquids that contain acidic elements such as citric acid or ascorbic acid can be prone to inaccurate results. Some eLiquids contain these acidic elements to reduce the nicotine smell or enhance flavour. But most vendors dont add acidic elements. The test and calculations rely on specific acid levels and adding more acid then what is already pre-defined in the test can skew results.

1) Put **mask and gloves on.**

NOTE: The Mask and Gloves included in the Nicotine Test Kit are suitable to handle the contents of the Kit itself and diluted eLiquid. They are not meant to be used to handle higher strength eLiquid. Please take all necessary precautions when handling high strength Liquids containing Nicotine.

2) **Clean your mug thoroughly by swishing distilled water through out.**

Don't use soap and/or a sponge to clean the mug. Simply swish around distilled water. You can air dry or shake out excess water.

3) **Using a syringe measure exactly 1ml, 2ml or 3ml eLiquid. Don't use the needle tip when drawing in the eLiquid.**

The eLiquid is a thicker consistency and has trouble being pulled through the small opening on the needle tip.

If you have never used a syringe and needle before. YouTube it. Heres a general breakdown.
Carefully take in the eLiquid by putting the syringe (without the needle screwed in) into eLiquid solution and suck up the amount of eLiquid with the plunger. Flip the syringe upside down (needle end pointing upwards (except without the needle)), flick the syringe with your finger (like you are flicking someone's ear) until all air bubbles reach the top. Slowly squeeze out the air bubbles by gently pushing the plunger. Try not to push to hard as you do not want to lose a lot of eLiquid. A couple drops is okay. Then check to see if there are any bubbles and ensure your measurement is correct. You may have to intake more eLiquid and repeat the process to ensure an accurate measurement. Dont worry, this process gets easier with practice.

eLiquid	Pros	Cons
1ml	Most amount of tests conducted	Least accurate Nicotine strength results (3-4mg margin give or take)
2ml	Good compromise between accuracy and tests conducted	Decent accuracy Nicotine strength results (2-3mg margin give or take)
3ml	RECOMMENDED: Most Accurate test results.	Least amount of tests conducted. Nicotine strength results (1-2mg margin give or take)

4) **Transfer eLiquid from syringe into the clean and dry mug.**
You may choose to add the needle onto the syringe prior to transferring to mug or just use the syringe. The needle is too small to suck up eLiquid's that are thicker but can push out eLiquid, just at a slow pace. Do what works for you, be safe, with or without the needle tip.

The contents in the Nicotine test kit itself are quite safe to use. The eLiquid being tested needs to be handled with **caution**. Again, we cannot stress this point enough. Do your research.

5) **Measure 10ml of distilled water and add to mug.**

Out of all the measurements used for the Nicotine Test Kit, the addition of distilled water is the least important as for accuracy. Just make sure it is above 10ml but below 15ml vicinity. The purpose of the Distilled water is to change the viscosity of the eLiquid. Basically to thin it out so that it can be tested. Distilled water is used because it has a pH of exactly 7.0. Where tap water can vary, which may skew results.

6) **This is where the Printer Friendly instructions are not as helpful.**

If testing over 24MG/ML or higher, skip to step 6a)

If testing 24MG/ML or lower. Please add 3-5 drops of Bromothymol Blue (Not included). Stir and ensure mixture turns blue.

6a) Using the 2nd (unused) syringe and needle, measure exactly 3ml of Test Solution. Check for air bubbles in the syringe. Go back to step 3 to see how to use a syringe and needle if you are not sure.

Slowly add Test Solution to mug, periodically, swirling/swooshing. Repeat above step until liquid turns green. If you run out of Test Solution and go beyond the 3ml initially used. Simply add another 3ml of Test Solution to syringe.

NOTE: Keep track of how many times you refill the syringe with Test Solution and how much was added to the syringe. This is very important. You'll understand in the next couple steps.

7) **Continue the above step (slowly adding Test Solution to mug) until liquid turns from green to a green with a yellow tint.**

8) **Now you need to slow it down a lot. Add 1 drop (at a time) of Test Solution and swirl/swoosh.** Repeat the above step until liquid turns **yellow**. Don't go overboard here but also make sure you get the **yellow** you are seeking.

9) Take note of how much Test Solution is left in the syringe. Subtract that number from the starting amount of Test Solution originally placed in the syringe (It should be 3ml if you followed this guide, or increments of 3ml).

IE. original = 3.0ml
remaining = 1.8ml

3ml - 1.8ml = 1.2 ml used.

Next you need to multiple the Test Solution used by a preallocated number.

If you used 1ml of eliquid, Multiply Test solution used by 18.93.
If you used 2ml of eliquid, Multiply Test solution used by 9.465.
If you used 3ml of eliquid, Multiply Test solution used by 6.31.

In our example. We'll say we used 3ml of eLiquid and we ended up using 1.2 ml of Test Solution.

1.2 x 6.31= 7.572 ------- This leaves us with a Nicotine Strength of 7.572mg/ml. Round up to 8mg/ml.

10) Now you are left with the task of cleaning up your "lab" area and gear. You are on your own here. But give your station a rub down and clean the "tools" used with the Nicotine Test Kit.

The contents in the mug are safe to dispose in your sink or toilet.

DON'T VAPE THAT STUFF. Be **careful** handling that bottle of eLiquid as well.

This concludes the Test. It may take a couple times doing the test, but you'll get the hang of it.

Good luck, vape safe and geek out. Questions, comments, feedback? info@nikitest.com