Drop, Drip – How many Drops of essential oils in a mL?

by Penny Keay

This is a very commonly asked question by those of us that use essential oils.

Our best answer is this: Droppers and pipettes are all different when it comes to measuring essential oils. Each manufacturer seems to have different size holes in the tips of their pipettes and droppers. And whether the pipette or dropper is made from glass or plastic can make a difference in the measurements of drops too.

The Aromatherapy standard for drops is 20 drops per mL of essential oil, of course, this all depends on the viscosity (thickness) of an oil.

The thicker the oil the less drops per mL and the thinner the oil the more drops per mL. The thicker heavier oils like Patchouli or Sandalwood have a tendency to become larger on the end of a pipettes, while the thin oils like any of the Orange citrus oils will produce a much smaller drop and drip off more quickly, resulting in many more drops per mL.

Unfortunately there is no way of knowing what your dropper is going to give you when it comes to actual counts, unless you sit down and experiment with each essential oil and the dropper you are going to use.

The only thing I can say is when you have the pipette/dropper in hand you will need to measure out 1 mL – provided your pipette is graduated (marked) and then suck 1 mL up in the dropper. Then you will have to count the drops.

This will then give you the number of drops and you will know how many drops per mL your pipettes are giving you.

Then there is the factor of pressure – sometimes the more pressure, the drop size can change too! Too quick pressure and drops may be smaller, soft pressure larger drops! Yikes…so many variables.

Again one of the main factors is how the manufacturer designs the dropper. The normal or regular size disposable pipettes that we carry (which are the most commonly used by aromatherapy folks) will produce approximately 20-25 drops per mL. BUT the fine or thin tipped pipettes produce 45-50 drops.

This is very important to know when you are blending and following recipes. Since most recipes designate drops – they are using the 20-25 drop standard. However if you are using the the fine or thin tipped style pipettes you will need to use 2 drops for every 1 drop the recipe would call for in the blend.

When you are blending, it is most important when calculating the amount of drops per mL of a particular essential oil – that you need to write it down. When you are creating your recipes of blends etc. try to always use the same style or type of dropper – so at the very least your recipes will come out consistent.

When mixing and blending small quantities the drop method works safely. When mixing and blending large amounts you will want to actually use mL (milliliters) and not rely on the number of drops to count and calculate. Most of the recipes found on Birch Hill Happenings Aromatherapy LLC site are designed to be easily converted to using mL when mixing and using larger quantities.

So generally when you are using the regular disposable pipettes figure 20-25 drops per mL and for the fine or thin tipped pipettes figure 45-50 drops.

Get your notebook ready and measure your commonly used essential oils to be sure.

Have fun blending!