

Give Your Essential Oils More Staying Power

by Kerri Mixon, of Pallas Athene Soap & Natural Skin Care (Spring Valley, California)

As we all know, natural botanical essential oils are very volatile—they evaporate quickly. This presents a challenge for soap makers, because cold process soap is too harsh to use during the first 4 weeks and the fleeting scent falls to half-strength after about 24 weeks. Therefore, the most important tip for preventing weakly-scented soap is: “Don’t make soap until it is needed; once made and cured, SELL it or USE it as soon as possible.” Another important tip for all the different processes of soap making: The essential oils should be added as the last step before pouring the formula into molds. Still, there are many more methods and tricks for slowing the evaporation of essential oils.

The “melt-and-pour” (m & p) process is the kindest to essential oils. For average scent retention, the m & p process requires about 15 drops of essential oils per 1 pound of melted soap. Essential oils should be added just as the liquid soap is beginning to cool, immediately before pouring into molds. As soon as it is poured into the mold, the soap temperature continues to decrease, which is easier on the essential oils.

Cold process (cp) soap making is much harder on essential oils. Due to the potential for loss of scent, cp requires about 1.5 teaspoons of essential oils per 1 pound of soap. It is common practice to combine the essential oils with a fixative (such as a carrier oil or natural clay). The essential oils are mixed with the fixative ingredient and the combination is sealed in an airtight container, to prevent evaporation. The essential oil/fixative combination is then added as the last step before pouring the cp soap into the mold. Cp is an exothermic chemical reaction, so the temperature of the soap will continue to rise and hold heat for up to 24 hours, which dissipates more of the essential oils. Soap makers attempt to impede the dissipation by covering the soap-filled molds with plastic saran wrap while the soap hardens.

Each essential oil is unique and has its own distinct properties. However, essential oils’ scents may generally be categorized as top (high), middle, or base (low) notes. Top notes (such as citrus) generally tend to be more fleeting than middle or base notes. Base notes (such as balsam, benzoin, and patchouli) generally tend to have more staying power. Therefore, an essential oil blend of top, middle, and base notes has the best combination of appealing aroma with the most staying potential.

For improved staying power, Scott Blackson (of The Soap Fairy) suggests flighty citrus essential oils should be blended with litsea cubeba, while patchouli and anise help to anchor other essential oil blends. If a blend does not hold up well, Mr. Blackson recommends using a greater quantity of the essential oils. Laura Lehmann (of The Prairie Lady) uses castor oil as a fixative and blends two or more essential oils to improve the duration of scent. Similarly, Susan Ryhanen (of Creekside Soaps) also uses castor oil as a fixative and stores each scent variation in a different cardboard box, to help reinforce the aroma.

Unfortunately, most of the essential oil distributors solicited to contribute information to this article declined the opportunity. Evidently, most essential oil distributors are hesitant to give advice regarding the use of essential oils in any product designed to come into direct contact with skin, especially soap. There seems to be too great of a liability risk. However, one essential oil distributor, Vivian Garcia (of Camden-Grey Essential Oils) does go on the record to suggest essential oil tips to her customers. She recommends many of the techniques previously mentioned and she recommends storing cp soap “with cotton balls soaked in the scent of the soap. This helps to perpetuate the fragrance.”

Personally, I have found unsaponifiable materials or materials that saponify very slowly to be the most effective fixatives. So, depending on the formula, I use bentonite clay, castor oil, glycerin, oat flour, or pumice olive oil as a fixative. All of my scents are completed blends of roughly 10% benzoin or patchouli, 20% other base notes, 30% middle notes, and 40% top notes. I cover my molds with plastic saran wrap, and I also group soap by scent for storage. Yet, the wonderful aromas still dwindle with time. Just like growing older, the evaporation of volatile essential oils cannot be entirely prevented, but it can be slowed and made less noticeable.

This article was published in the Winter 2003-2004 issue of “*The Handcrafted Soap Maker, The Journal of the Handcrafted Soap Makers Guild.*”

Please, direct comments and questions through <http://www.PallasAtheneSoap.com/contact.html>