Creams, Lotions and Lip Balms

Made with your Wonderful Honey, Beeswax, and Propolis

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Moving Beyond Honey and Candles: Natural Beeswax & Honey Cosmetics

- Burt’s Bees did it! Why not you?
- Market for natural cosmetics is huge and still growing.
- Many products such as lotion bars and lip balms are very easy to make.
Adding Cosmetics to your Product Line Will Increase your Bottom Line

And even if you never sell your products, you will have a better quality product for your own use than you can ever buy in a store at a fraction of the cost!
What are Creams and Lotions?

- Emulsion: mixtures of oil and water (which actually do mix with the addition of an emulsifier).

- Two types:
  - Oil in water: lotion-like, penetrates skin
  - Water in oil: cream-like, barrier on skin

- Basic beeswax hand cream is a water-in-oil emulsion using borax as an emulsifier.

- Most recipes use emulsifying wax, aka “e-wax,” which is a chemically altered vegetable or petroleum-based wax treated with a detergent. Each manufacturer has a recommended use ratio, which should be STRICTLY followed for success, e.g., “Use 10-15% by weight.” It is better to use a bit more and back it off later than to not use enough and risk separation.
What is an Emulsifier?

- **FAT MOLECULES**
- **WATER MOLECULES**

**EMULSIFIER**

**CREAM OR LOTION**

- Oil and water
- Oil, water, and emulsifier
Designing your Own Creams and Lotions

- Four phases:
  - Liquid phase
  - Oil phase
  - Emulsifier
  - Preservatives

- Proportions vary between creams and lotions

- Honey is part of the liquid phase, if used

- Beeswax is part of the oil phase, if used
Design Guidelines

• Proportion guidelines:
  • Water 40-70%
  • Oil 10-30%
  • Emulsifying wax 20% of oil weight
  • Stearic acid 0-5% (optional thickener)
  • Preservative: 0.1%-1.5%, depending on type chosen. Follow manufacturer’s guidelines.
  • Fragrance: 1/2 – 1 Tbsp. per pound of product.

Higher amounts of water give you a lotion.
Higher amounts of oil give you a cream.
Some Oils and Fats You May Want to Try

- Sweet almond oil
- Grapeseed oil
- Olive oil
- Safflower oil
- Sunflower oil
- Flaxseed oil
- Jojoba oil
- Mineral oil
- Avocado oil

- Shea butter
- Cocoa butter
- Coconut oil
- Lanolin
- Palm kernel oil
- Palm oil
- Mango butter
- Aloe butter

Each lends a different character to the finished product. You can get an idea of the characteristics of each by researching them but ultimately experimentation is your best tool.
And in the Liquid Phase, You Might Try:

- Herbal infusions such as chamomile tea
- Honey, honey, honey!
- Glycerin
- Aloe water
- Coconut water
- Rose water or orange blossom water
Experiment in Small Batches

- Nothing is more disappointing than to have your cream separate or go moldy after you spent so much time, effort, and money making it!

- Double and triple check the amounts of both preservatives and emulsifying wax in your recipes.

- Keep your work area scrupulously clean and sterilize your tools.
About Preservatives

- If the recipe contains water and a non-mineral oil, it needs a preservative. If you do not use one, you must keep the cream in the refrigerator and use it within two weeks.

- My favorite is Optiphen Plus.
  - Higher temperature range for adding to product
  - Does NOT contain formaldehyde
  - Does NOT contain propylene glycol
  - Very effective in preventing spoilage
Lip Balms
Very Helpful Tool for Making Lip Balm: Filling Tray
Lip Balms are Easy!

• Lip balms have no water, hence they do not need a preservative.

• Many recipes add Vitamin E oil as an antioxidant. (This is NOT a preservative.)

• Lip balms are a combination of solid and liquid oils, and wax: beeswax.

• Because the product is used on the mouth, be sure to use only your cleanest, best cappings wax. Do not risk having pesticides in your beeswax by using melted brood comb or mixed wax from a solar wax melter!
Using Propolis in Your Products

- Propolis can be a great addition to your products because of its antimicrobial properties but you must be VERY cautious how you label it to avoid violating FDA labeling laws.

- You can either use it as a powder or stir it in while heating to release the volatile organic compounds.
Using Powdered Propolis

- Powdered propolis is nice because the finished cream or lip balm has little flecks of it distributed throughout the product.

- The temperature must be very carefully controlled. If the mixture is allowed to get hotter than about 170° the propolis will melt in a blob at the bottom of the pot.
Cleaning Propolis

- Fill a 1 pound clean metal coffee can about 1/3 full of collected propolis and add about the same amount of hot water.

- Set in a 200º oven for about 2 hours. Stir occasionally. You can also heat very gently over direct heat until gummy, stirring continuously.

- Remove, let cool, and pour off the dirty water.

- Freeze the can with the propolis in it.

- Scrape off any bits of wood or gunk that might be adhering to the surface of the propolis blob at the bottom of the can.

- Chip out the clean propolis with hammer and chisel.
Cleaned Propolis
Grinding the Propolis

- After the propolis has been cleaned and is perfectly dry, you can grind it to a fine powder.
- Use an electric coffee bean grinder which you have dedicated to this purpose.
- The propolis should be cold. You can even freeze it. The colder it is, the more brittle, and the easier it will grind up.
- Sift out any chunks left.
Using Propolis Powder

- Your powdered propolis can be used in lip balms, creams and lotions, or in soap.

- Be sure the propolis powder is at room temperature before combining it with the melted fats in your product.

- Have the melted fats as cool as possible or the propolis will clump together in a blob at the bottom of the container rather than dispersing nicely. It should be no hotter than 170°, and sometimes even this may be too hot.
Labeling your Products

- **Cold process** soap made with lye, fats and water is **exempt** from FDA labeling requirements unless you claim it does anything other than cleanse (e.g. deodorize, moisturize, soften). Technically, you do not even need to list the ingredients, although consumers expect and look for this.

- A **cosmetic** is a product intended to effect a physical change on the human body, like moisturizing, rather than a physiological change, which is what a drug does. Making health claims for your cosmetics means you must follow the testing and labeling requirements for drugs.
Things you Should NOT Say about your Products

- “This cream will make you look younger.”
- “Our moisturizer repairs the skin’s moisture barrier.”
- “This soap cures poison ivy.”
- “Our lip balm will heal cold sores.”
- “Try this lotion. It will really soothe your irritated skin and help relieve that bug bite.”
It does not matter that honey and propolis are both antimicrobial or that beeswax is good for your skin. If you make health claims, your product becomes a drug. Drugs must be tested for safety.
FDA Requirements for Labeling Cosmetics

- Front panel must have:
  - Name of the product
  - Net quantity of contents by weight in ounces for solids, gels, semi-solids, and by volume (fluid ounces) for liquids.
  - Name and address of the firm marketing the product, including street address, city, state and zip code. Street address may be omitted if the firm is listed in a current city or phone directory.
  - Ingredients in descending order of prominence, by weight.
Testing Requirements

- The FDA does NOT require that cosmetics manufacturers test their products for safety. It DOES require that the product’s safety be adequately substantiated (e.g. all ingredients are known to be safe).

- Cosmetics must not be adulterated or misbranded. Adulterated cosmetics might contain a substance harmful to consumers, a filthy, putrid, or decomposed substance, or be manufactured under unsanitary conditions.

- Certain pigments are restricted and must be tested. Most natural mineral pigments are okay, but check the fda.gov website to be sure if you color a product.
Fda.gov has clear, easy to read summaries of labeling requirements.
And, now, just to get you started....
Easy Creams and Lip Balms
-for adding variety and value to the beekeepers’ product line.

Gooserock Farm Beeswax Hand Cream (Makes about 20 2-ounce jars.)

20 fluid ounces pure water (by volume)  
16 ounces (by volume) light 70-weight mineral oil (available as 70 FG Crystal  
Plus Oil from STE Oil Co., Inc., www.steoi.com: 800-967-1931.)  
7 ounces by weight clean beeswax  
1 Tablespoon borax (as in 20 Mule Team, carried by most supermarkets in  
the laundry detergent section)  
1 Tablespoon fragrance or essential oil of your choice (optional)

Combine the water and borax and bring to a simmer. Do NOT boil. It should  
just be steaming. In a separate container, melt together the beeswax and  
the mineral oil over low heat. (You may, for safety’s sake, choose to do this  
over a double boiler, but I have found direct heat works fine provided you do  
not leave the area, you are melting the wax with oil, AND you use very low  
heat.) When the wax is melted, add the water-borax mixture. Stir in the  
essenial or fragrance oil, and whisk or beat the mixture for a minute until  
well combined. Immediately pour into jars. The cream will solidify as it  
cools. You can combine the ingredients in an old crock pot on the low setting,  
which gives a bit more bottling time if making a larger batch. Be careful not  
to overheat the ingredients or the cream will not be as soft when cool. Both  
the oil-wax and the water-borax should be just above the melting point of  
beeswax (150°F).

Lotion Bars (Makes about 15 one ounce bars)

5 ounces (142 gms.) by weight clean beeswax  
5 ounces by weight sweet almond oil (approx. 2/3 cup less 1 Tbsp. by volume)  
5 ounces (142 gms.) by weight coconut oil OR cocoa butter OR shea butter  
OR a combination  
1 Tablespoon fragrance or essential oil of your choice

Melt the first three ingredients together until the beeswax has just melted.  
Remove from the heat and stir in the fragrance oil. Ladle into molds of your
choice. Be careful not to overheat; this will cause small dark particles to form, making your lotion bars appear dirty!

**Smooth and Dreamy Beeswax Lip Balm** *(Makes about 35 tubes)*

1½ ounces by weight clean beeswax  
1 ounce by weight cocoa butter  
1½ ounces by weight shea butter  
2 ounces sweet almond oil  
1 to 2 teaspoons flavor oil (made especially for lip balms) or ½ teaspoon peppermint essential oil  
1 teaspoon Vitamin E oil (optional)

Melt the beeswax in a double boiler over warm water, then stir in the cocoa butter, shea butter, and sweet almond oil. When all the fats are melted, remove from the heat and stir in the optional Vitamin E and flavor or essential oils. Pour into lip balm containers. This is just one of many good lip balm recipes.


Good source of lip balm tubes and filling trays, as well as many cosmetics/soap-making supplies: Brushy Mountain Bee Farm, [www.brushymountainbeefarm.com](http://www.brushymountainbeefarm.com).

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Thank you!