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Making Your Own Castile Soap Bars

Traditionally, Castile Soap is made from 100% olive oil. But many people prefer to add palm and/or coconut oil for a better lather and feel. The basic recipe below uses olive and coconut oil, in a 4:1 ratio. 3

You can experiment with using different oils or ratios. Just remember to recalculate the amount of lye needed: too much lye makes a caustic soap. You can also use more oil than required for the amount of lye, to express the properties of a particular oil in the soap. This is called 'superfatting.' There are several lye calculators on the web; Summer Bee Meadow of appears to be the simplest, and allows for superfatting.

Use a scale to weigh ingredients (in ounces); be accurate. You cannot use measuring cups. An electronic postal scale that measures to 0.1 oz is best.

Using Animal Fat

Rendered animal fats (such as tallow from cows or sheep, or lard from hogs), can be used for all or part of the oils, but then it is not 'Castile.' The process to make the soap is basically the same as for a Castile soap, but the resultant soap will be 'harder.'

To learn how to render your own tallow, refer to the <u>Candle and Soap</u> $_8$ website; to recalculate the amount of lye needed, use the online calculator at <u>Summer Bee Meadow</u> $_6$ website.

Safety Precautions

Lye is extremely caustic and dangerous; be very careful when working with it, and take these precautions:

- ✓ Read and understand each step before beginning;
- ✓ Understand basic soap making procedures;
- ✓ Assemble all ingredients & equipment; ensure all utensils are in good working order;
- ✓ Protect work surface and floor with layers of newspaper or old vinyl tablecloths;
- ✓ Keep children and pets away from the work area;
- √ Have 1 or 2 gallon-bottles of white vinegar on hand to neutralize any spilt lye;
- √ Work methodically and without distraction;
- ✓ Never leave heating oils unattended;
- √ Wear safety goggles, rubber gloves, and an extra layer of old clothing.
- √ The soap remains caustic for 24 hours after making; take care during entire time.

Castile Soap Recipe

Makes 4.5 pounds soap. (from Candle and Soap.) 3

- 40 oz. olive oil
- 10 oz. coconut oil
- 16 oz. distilled water
- 6.9 oz. lye
- 1.5 2.2 oz fragrance/essential oil,
- scale (postal scale, to 0.1 oz)
- soap pot
- 1-quart glass measuring cup/pitcher

- 1-cup glass measuring cup/pitcher
- tall pitcher with lid
- mason jar
- stainless steel spoon
- immersion blender
- soap molds; see <u>SummerBeeMeadow</u> 6
- rubber spatula

Basic Soap Making Instructions

- 1. Clear your workspace, and gather your ingredients and equipment.
- 2. Make your lye solution first, as it needs to cool before mixing with the oils (see recipe below). **Wear your goggles and gloves!**
- 3. Measure oils, weighing liquid oils together in the quart pitcher, solid oils in the soap pot, and essential oils or fragrance in smaller pitcher:
 - ▶ Place glass pitcher on scale; zero-out the weight. Carefully pour olive oil into pitcher to exact desired weight. Set aside. (If using other liquid oils, zero-out the scale again, and add desired weight of second oil; etc..)
 - ★ Place soap pot on scale; add solid coconut oil to exact desired weight. (If using other solid oils like palm, zero-out the scale again, and add second solid oil to the desired weight; etc..)
 - ★ If using essential oils or fragrance, weigh them in a separate glass cup (after zeroing-out weight of the cup) and set aside.
- 4. Place soap pot with solid oils on stove over medium heat. Gently melt, stirring, until oils reach about 110 degrees F. **Remove from heat**, but continue stirring until all melted.
- 5. Add measured liquid oils (room temperature) to soap pot. They will cool the mixture somewhat. Allow to cool to 100 degrees F. This is the temperature you want, for adding your lye water, which should also be 100 degrees F.
- 6. Before adding the lye water, make sure you have everything you need at hand, because things happen quickly. This includes all your additives (essential oils, etc), spoons, immersion blender, spatulas and soap molds.
- 7. Wear your goggles and gloves! and grab your immersion blender.
- 8. Slowly pour lye water into oils in the soap pot. Right away, the oils will turn cloudy. Using immersion blender as a spoon (don't turn it on), stir solution to blend the lye water into the oils.
- 9. Set emptied lye-water pitcher aside in a safe place (to clean later). Keep your focus on the soap pot, because the reaction happens quickly.

Homemade Bar Soap

- 10. While stirring with immersion blender, turn it on in short bursts, 3 5 seconds each, and stirring with it 'off' in between. You will notice the reaction happening. Keep up short bursts until the mixture is thoroughly blended, a condition called "trace." This is a point of no return--your soap will not go back to being oil and lye.
 - ★ To test for trace: dip spatula or spoon into the mix,dribbling a bit of it back into the pot. If it leaves a little "trace" behind, you're there. That is, a little mound of soap takes 1-2 second to disappear back into the mix. It may not be very thick, just well mixed with no streaks of remaining oil. It thickens with time.
 - ★ If you hand-stir (not using an immersion blender) it could take an hour or more to reach trace. With the immersion blender, it should take less than a minute.
- 11. Before the mixture gets too thick, add essential oils or fragrance (if using) in a steady stream, while stirring with the immersion blender 'off.'
- 12. The mixture will have thickened a bit. You can pour it into molds right away; or let it thicken a bit (but not too thick or it won't pour and you'll have one big hunk of soap).
- 13. Pour into molds in a back and forth motion, to keep the level even. Scrape out last bits of soap with spatula.
- 14. Pick up mold and tap it on the counter to dislodge any air bubbles. Set in a warm safe space to begin curing (saponifying). This process causes the mixture to heat up, and you don't want a great contrast between the temperature of the surrounding air and the soap, so it helps to wrap old towels around molds to keep them warm.
- 15. Leave it undisturbed for 24 hours. In the meantime, put all your stuff away. Wash all utensils in hot soapy water. **Wear your goggles and gloves!** The raw soap left in the pan is quite caustic.
- 16. After at least 24 hours, pop or slide soap out of mold, and using a sharp knife, cut into bars. Set aside to continue curing. (It can be used safely in 48 hours, but it's best to let it completely cure for 4 weeks or more, to evaporate any water and ensure a milder soap that lathers best).

Making the Lye Solution

The most popular brand of lye, Red Devil, is no longer actually lye and SHOULD NOT BE USED. It has been altered to discourage meth manufacture, which requires real lye. You will have to shop around for real lye.

- 1. Place tall pitcher on scale and zero-out the weight. Pour in distilled water to desired weight; set pitcher aside.
- 2. Wear your goggles and gloves! Place Mason jar on scale and zero-out the weight. Carefully shake lye into jar until it measures the calculated amount. Immediately close lye container and put away in a safe place.
- 3. Carefully and slowly, pour measured lye into the water (never the other way around--never add water to lye or it will explode and you will be badly burned).
- 4. Gently stir mixture, using a stainless steel stirrer. The mixture will start to get quite hot (over 200 degrees F) and may even bubble. Continue gently stirring until all lye is thoroughly mixed.

Homemade Bar Soap

5. Place lid on pitcher and set aside, out of the way and not near anything that is heat sensitive, to cool. It will be ready to use when it has cooled to about 100 degrees F. Mark the pitcher "Danger-Iye solution" just to be extra safe, especially if there are others around.

Making Liquid Soap from a Solid Bar

Making your own soap bars can be daunting, and dangerous. But you can make liquid soap from bars made by someone else. This recipe is from AssociatedContent.com. 5

- 1 cup firmly packed grated Castile soap (about two 4 oz. bars)
- 4 cups water
- 2 tablespoons vegetable glycerin

Before you begin, grate castile soap with cheese grater, into large pot. Try to shred it as fine as possible since it will take less time to melt the soap down if the pieces are small.

Mix water with grated castile soap in pot. Set over low heat, stirring occasionally until soap has dissolved. Add glycerin. Keep your eye on it! Once dissolved, transfer to a jar and cover tightly. This makes a thick liquid soap. For a thinner liquid soap, add more water until desired consistency is reached.

Sources:

- 1. http://www.cleaning101.com/sdalatest/html/soapchemistry1.htm
- 2. http://www.cleaning101.com/sdalatest/html/soapchemistry2.htm
- 3. http://candleandsoap.about.com/od/soaprecipes/a/castrecipe.htm (see recipes 1, 2, 3, and 4; recipe 4 was used for this article)
- 4. http://millersoap.com/castile.html#FavCastile
- 5. www.associatedcontent.com/article/208664/homemade skin care recipes liquid castile.html
- 6. http://www.summerbeemeadow.com/
- 7. http://candleandsoap.about.com/od/lyecalculators/tp/toplyecalcs.htm
- 8. http://candleandsoap.about.com/od/soapmakingoils/ss/rendertallow.htm