

Bees Wax, Cocoa Butter, and Shea Butter are solid at room temperature because they have more saturated fatty acids than they do unsaturated (Webb). We did the process in this order to get the product to mix uniformly. The cooling process causes the product to turn to a waxy substance, so it's always best to pour your lip balm in its containers while it's still hot.

Works Cited:

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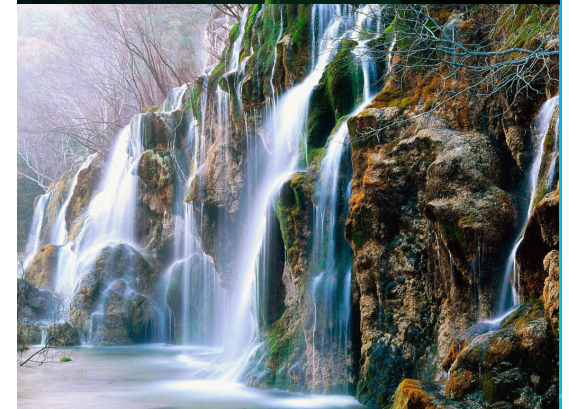
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Simply Soft



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Exfoliating Scrub

Price: \$ 4.00 & \$ 6.00

Ingredients: Sodium Oleate, Water, Sodium Stearate, Sodium Palmatate, Sodium Laurate, Sodium Linoleate, Sodium Myristate, Sodium Caprate, Sodium Arachidate, Sodium Alpha Linoleate, Glycerin, Fragrance.

WARNING: This product contains: Coconut Oil.

How It's Created: To create exfoliating scrub we heated solid Coconut Oil down to a liquid and then added Canola Oil to the mixture. Once we heated both we poured it into a bowl of sea salt that contained Vitamin E oil. We then stirred it together and let it sit.

Chemistry: The chemistry that went behind this product is why some fats are solid at room temperature and how this scrub works. Coconut Oil is solid at room temperature because it has a higher amount of saturated fatty acids versus the lower quantity of unsaturated fatty acids it contains. Because saturated fatty acids are solid and unsaturated fatty acids are liquid at room temperature, Coconut Oil is a solid fat (Webb). That's why we must melt the oil before adding it to our sea salt. What makes your hands feel smooth and soft is the salt and essential oils rubbing your dead skin off it rejuvenates your new layers of skin.

Shea Butter Soap:

Price: \$ 3.50

Ingredients: Sea Salt, Coconut oil, Canola Oil, Vitamin E.

WARNING: This product contains: Coconut Oil and Shea Butter (a derivative of a nut product).

How It's Made: To make Shea Butter Body Soap we first measured out our oils that were needed for our recipe. With that we were able to find how much lye and water we needed to make our soap. Once we found that, one person made the lye solution and the others were measuring the ingredients needed. We then melted down all the solid fats first before we added the liquid fats. After we added both fats together we waited for both the lye solution and the oil mixtures to reach the temperature of 100 degrees Fahrenheit before we mixed both together. As we began mixing the product (saponification) we waited for the mixture to reach trace and once that happened we added fragrances and placed our soap into molds.

Chemistry: The chemistry behind soap is without lye to react with the melted fats there would be no chemical reaction and soap wouldn't form (Webb).

When adding 3 NaOH (sodium hydroxide) to a triglyceride it causes the molecule to have a double displacement causing the OH to replace the O and the Na to combine with the O and the other chain, causing it to create 3 soaps and 1 glycerin (Webb).

Water is polar and oil is non-polar, witch means that the oils will not be removed from your skin if you just use water. Soap works because it creates a polar and non-polar bond, creating a way for water and oil to come together and then be removed.

Price: \$ 1.50

Lip Balm

Ingredients: Olive Oil, Beeswax, Vitamin E, Pure Cocoa Butter, and Pure Shea Butter.

WARNING: This product contains: Bees Wax, Cocoa Butter, and Shea Butter (a derivative of a nut product).

Procedure: Making Lib Balm consisted of melting down Bees Wax, Cocoa Butter, and Shea Butter (the solid fats) first. Once we did that we added Olive Oil, Vitamin E Oil and Mica for coloring. We then stirred the mixture together and poured them into Chap Stick containers. We let the product cool until ready to use.

Chemistry: The chemistry in making lip balm was a physical reaction.