



Standard Laboratory Operating Procedure #503 Soy-Based Lip Balm

Laboratory: Biotechnology
SOP prepared by: R. Sanders

Location: GI, RM 129
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General: Chemists work in every level of the cosmetic creation process, from writing formulas to testing new products. They can be responsible for basic laboratory procedures and for managing materials acquisition and distribution within a company. Some cosmetic chemists work in the laboratory, and some focus on sales and marketing of the products they create. Another area of expertise for cosmetic chemists is strict adherence to safety protocols and regional regulations governing the manufacture and sale of products intended for human use. Safe testing procedures of cosmetic products are also followed and monitored by a cosmetic chemist.

Safety: Safety Glasses

Materials:

Carolina Magnetic/Stirring Hot Plate	Weigh Boats
Soy Wax	Electronic Balance
Prang Soy Crayons	Mini Cheese Grater
Serological Pipettes & Pump	Cocoa Butter Shavings
Flavoring Oils	Sweetener
Micropipette & Tips	Stir Sticks
Soybean Oil	Pyrex Beakers

Procedure:

1. Weigh 25g of soy wax and place into a 200mL Pyrex beaker.
2. Using a serological pipette, measure 20mL of soybean oil, and add to the soy wax in beaker. Then measure 5mL of olive oil and add to soy wax.
3. Start a water bath using a 600mL Pyrex beaker filled with 250mL of water and place on a Carolina Magnetic/Stirring Hot Plate to heat water to 66 degrees Celsius. Once water bath reaches 66 degrees, place beaker of wax and oil mixture inside the water bath.
4. Stir the soy mixture until all wax flakes have melted.
5. Remove beaker from water bath pour melted soy wax mixture into a 4oz plastic cup, then add 0.1g of cocoa butter shavings, 0.5g of soy crayon shavings, 0.1g of sweetener and 200uL of flavoring oil. Mix until all crayon shavings have dissolved, then pour 3mL into lip balm tubes.
6. Allow tubes to sit for 5 minutes to solidify.