Lipstick Chromatography

**Procedure:**

1. Put on disposable gloves for this test.

2. Place a small amount of “Lipstick Developing Solvent” in a beaker to a depth of about 0.5 cm. Place a watch glass on the beaker.

3. Take each of the two known tubes of lipstick and smear each onto a napkin. You only need a size about 1-2 cm square.

4. Cut about 1 square centimeter from each lipstick-containing napkin and put each in a test tube. Make sure your scissors are clean between cutting different napkins! You don’t want to cross-contaminate.

5. Add a few drops of the “Lipstick Extraction Solvent” to each tube. If the solvent is completely absorbed, add a couple more drops. (You don’t want too much solvent or else the spotting on the TLC plate is very light and you will have to re-apply several times.)

6. Let test tubes sit for approximately 15 minutes. Occasionally agitate (gently shake) the test tubes.

7. Use a capillary tube to apply the lipstick to the TLC plate. Place a capillary tube into the solution in the test tube. You will notice the solution goes into the tube. Touch the capillary tube to the TLC plate 1.5 cm from the bottom. Let this dry completely and apply another spot. Let this dry. Repeat until you are satisfied that the spot is dark enough.

8. Apply remaining samples in the same way.

9. Place the TLC plate in the beaker with the “Lipstick Developing Solvent”. Replace the watch glass on top of the beaker.

10. Let stand and observe until the solvent front has moved about 5 cm from the sample spot.

11. Remove the TLC plate and mark the solvent front.

12. Let it dry and compare the colored bands.

13. View the plate under UV light (in a dark area of the room). Circle any spots you could not see in visible light and make note of those spots that fluoresced versus those that did not.

14. Bring the lipstick developing solvent back to your instructor for disposal.