

Making soy-based Ink

Standard Operating Procedure Soy Ink

Laboratory: Biotechnology/Bioresearch

Location: Bioresearch Lab

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General: Ink is a pigment mixed in a liquid that will not blur when put on paper. Inks made with soybean oil are made from a renewable resource, much more biodegradable, more easily removed from paper during recycling and print with brighter colors that don't rub off.

Safety: Safety glasses if working in Bioresearch Science Lab

Materials

unsweetened Kool-Aid packets	disposable pipettes	water
balances	vegetable (soybean) oil	stamps
small paper cups	soy lecithin	paper
paper towels	stir sticks	small sponges
Petri dish or souffle cup		

Procedure

1. In a paper cup, add 6g of Kool-Aid and 5mL of water. Mix completely with stir stick.
2. Add 1mL of soybean oil to the Kool Aid solution and mix well.
3. Using a balance, weigh out 0.3g of soy lecithin granules, or 0.5mL of liquid lecithin and stir until all granules have dissolved completely.
4. Pour the soy ink into the middle of a small sponge in a petri dish or souffle cup. The soy ink will soak up quickly.
5. Moisten a rubber stamp by pressing the stamp on to the soy ink in the sponge, then print image on paper.
6. Steps 1-6 can be repeated to create different colors.
7. Steps 1-6 can be repeated with various milk types, as well.
8. Compare the performance of the inks.

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