

## Soy-stainable

### Standard Lab Operating Procedure #500 Biobased Bubbles

**Laboratory:** Biotechnology/Bioresearch

**Location:** Bioresearch Lab

**SOP prepared by:** R. Sanders

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#### Problem

What are the performance characteristics and environmental benefits of biobased bubbles?

**Safety:** Do not drink the bubbles even though they are non-toxic.

#### Materials:

vegetable glycerin	biobased dish soap (7 <sup>th</sup> Generation)	pipettes
graduated cylinder	sugar	balance
bubble bottles		

#### Procedure:

1. Using a graduated cylinder measure out 10ml of warm water and pour into plastic cup.
2. Using a disposable pipette, measure out 1ml of bio-based dish liquid and add to cup of water.
3. Measure out 1 ml of glycerin and pipette it into the mixture.
4. Weigh out 0.5 g of sugar and add to the solution in the cup.
5. Stir solution to dissolve sugar and pour into the bubble container.
6. Produce bubbles to collect data.
7. Record observations in lab notebook in comparison to store bought bubbles, i.e. estimating bubble amount produced, slipperiness, etc.
8. Collect quantitative measures: i.e. time before bursting, bubble weight, bubble size, etc.

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