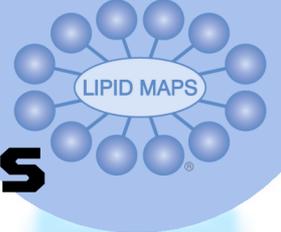


LIPID MAPS

Mini Experiment Series

Lava Lamp



Background

In this experiment, you will see how density and polarity cause a reaction between oil and water.

Materials

- Tall Empty Jar or Bottle
- Water
- Vegetable Oil
- Baking Soda
- Food Colouring
- Vinegar



Method

- Step 1** Put a few tablespoons of baking soda at the bottom of the jar / bottle.
- Step 2** Add water until the jar is a quarter full.
- Step 3** Add 5-10 drops of food colouring and gently mix all ingredients in the jar to combine.
- Step 4** Add vegetable oil until the jar is three-quarters full.
- Step 5** With the jar on a flat surface, slowly add in vinegar one tablespoon at a time. Add more as needed.
- Step 6** Watch the lava lamp activate!

Outcome / Purpose

How is this applicable to lipids? / What is it used for?

The water and oil do not mix and the oil doesn't change color because the food coloring is water soluble. The baking soda reacts with the water to make bubbles of carbon dioxide.

The bubbles attach themselves to the blobs of colored water and bring them to the top of the glass. When the bubbles pop the blobs of colored water fall back to the bottom of the glass.

