

Lava Lamp Experiment



Material Needed:

- Water
- Oil (vegetable oil)
- Food coloring
- Alka-seltzer effervescent antacid tablets
- Tall glass

Instruction:

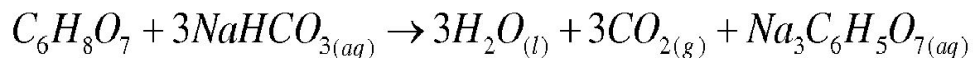
1. Fill the glass with 1 to 2 inches of water
2. Add food coloring.
3. Fill the rest of the glass with oil but stop at about 1 inch from the top so that it won't bubble over.
4. Drop an antacid tablet into the mixture and watch.

The science behind it

Alka Seltzer tablets contain 3 ingredients: aspirin (pain killer), sodium bicarbonate and citric acid. When dropped into water, sodium bicarbonate and citric acid combine to form sodium citrate, carbon dioxide, and water. This sodium citrate can neutralize stomach acid and this is why alka-seltzer is an antacid medicine. During this process, carbon dioxide is created. Because carbon dioxide has a lower density than water, it forms bubbles and flows to the top taking some dyed water along with it. When the bubbles burst, the blobs of colored water sinks back to the bottom because it has a higher density than oil. This goes on until all the ingredients in the tablet are used up.

The science behind it:

Have you ever seen a lava lamp? Do you ever wonder why the big bubbles form? Well now you can make one on your own! All we'll need is water, oil, and our special alka-tablets. It works because water and oil do not mix. Then our special tablets will make the water bubble to the top of the glass because it makes carbon dioxide. Once our bubbles burst, they will sink to the bottom of the glass until the alka-tablets are all gone.



Citric
Acid

Baking Soda

Water

Carbon
Dioxide

Sodium Citrate

Shopping list:

Material list	Price (+shipping)	Where is it sold
<u>Vegetable oil</u>	\$4.49	Amazon
<u>Alka-seltzer tablet</u>	\$6.98	Amazon
<u>Food coloring</u>	\$3.99	Amazon
<u>Plastic squeeze bottle for vegetable oil and food coloring (50 pcs)</u>	\$8.99	Amazon
<u>Sealing plastic bag for Alka-seltzer tablet(100 bags)</u>	\$5.83	Amazon