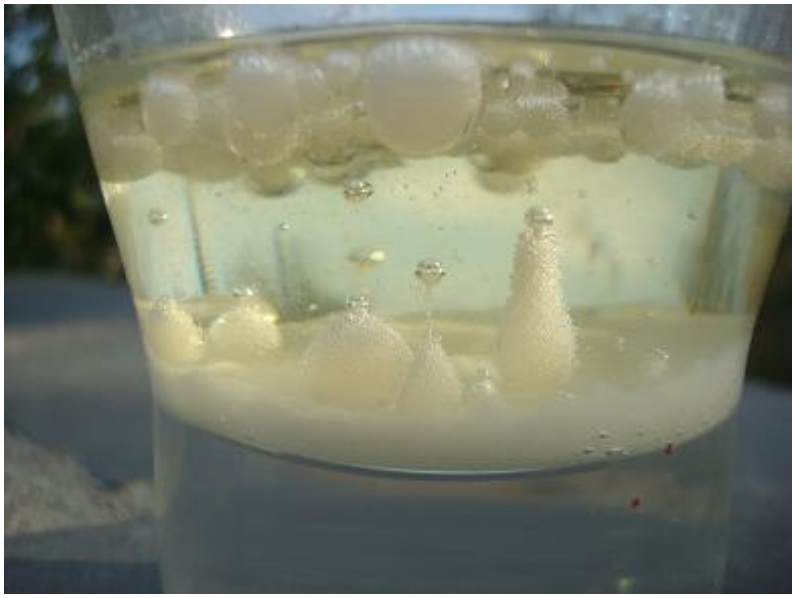


Make drops of vinegar fly up and down!

Material:



- vinegar,

- oil,
- baking soda,
- a glass or jar.

Instruction:

At the bottom of the glass pour baking soda layer (about 1 cm. thickness). Soda should not be on the walls.



Then, pour the oil into a container. Get him carefully down the side of the glass, taking care to not mixed with the baking soda. The glass should be filled almost completely.





Add to the oil a few large drops of vinegar.







If the experiment is carried out accurately, drops wander up and down like a yo-yo.

Explanation:

Vinegar is an aqueous solution of acetic acid, CH3COOH. Soda is sodium bicarbonate, NaHCO3. Vinegar has a higher density than the oil, thats why it sinks in the glass. When it touches the surface of the soda, comes the reaction:

acetic acid + sodium bicarbonate -> sodium acetate + carbonic acid



