

Caleb Siegling  
*Antibubbles and Surface Tension*

I created antibubbles in three household items: soap, maple syrup, and olive oil to see which one has the most surface tension. You can use this information to understand why certain substances are used for cleaning dishes and other things. My question was what household substance has the most surface tension? The way I approached my experiments was to do 9 antibubbles in each substance to get accurate results. I added all of the times for each substance and turned them into an average time. I also did observations using slow motion on my phone to see the size and the time of the antibubble to get the most accurate answer for my question and hypothesis. My results were that olive oil's average antibubble time was 744 milliseconds. Maple syrup's average time was 763 milliseconds. Soaps average time was 378 milliseconds. This means that maple syrup has the most surface tension and soap has the least. My project contributes information about surface tension in house hold objects. It shows how science connects with things like olive oil, maple syrup, and soap and why soap is effective in cleaning dishes. It also helps you understand why Dawn dish soap is used to help clean birds affected from oil spills. I believe that I met my objectives, answered my question, and understand why dish soap is effective in cutting the surface tension of syrup and oil.