

CALIFORNIA STATE SCIENCE FAIR 2009 PROJECT SUMMARY

Name(s)

Natalie R. Pita

Project Number

J0522

Project Title

How Fast Does an Alka-Seltzer Tablet Make Gas?

Abstract

Objectives/Goals

My Hypothesis is that the reaction of the Alka-Seltzer tablet will occur at a faster rate when in hot water. **Methods/Materials**

1. Safety Goggles 2. 12 Alka-Seltzer Tablets 3. Thermometer 4. 60 ml Syringe 5. Plastic Tubing 6. Clear wide mouthed bottle with cap 7. Drill 8. center punch 9. Measuring Cup 10. Masking Tape 11. hot and cold water 12. Clock or stopwatch 13. Ice 14. a helper 15. Lab notebook and pencil

Results

The fastest was hot water(35 degrees Celsius) which finished at 60 seconds. Room temperature(21 degrees Celsius) was the second fastest and finished at 140 seconds Cold(4 degrees Celsius) was the slowest and finished at about 420 seconds

Conclusions/Discussion

After I completed all 12 trials of my experiment. My conclusion was that the hot water allowed to Tablet to produce gas the fastest. While Room temperature was the second fastest, and cold being the slowest. My hypothesis was correct.

Summary Statement

I tested different temperatures to see which one allowed the Alka-Seltzer to produce gas the fastest.

Help Received

My Dad used the stopwatch and timed the reaction, my mom helped with the decorating of my board, and my dad also helped to weight down the and wire the board, My dads coworker taught me to use excel