CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY

Name(s)
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Project Number
34098

Project Title
Luminol Reaction Times

Abstract

Objectives/Goals
The objective of my project is to determine if temperature affects the chemical reaction of luminol.

Methods/Materials
In my project I used a third cup of water and a spoon to mix the reaction. I also used a third milliliter perborate mixture, a third milliliter luminol, and a few copper sulfate crystals. Once the water and chemicals were mixed together I used a stopwatch to measure the amount of time the reaction lasted in different temperatures.

Results
The chemical luminol has a longer reaction time in colder temperatures. The experiment lasted an average of 46.6 seconds in 3 degrees Celsius. The warmer chemical reaction, about 73 degrees Celsius only lasted an average of 2.6 seconds.

Conclusions/Discussion
My conclusion is that a lower temperature makes the chemical reaction with luminol last a longer period of time then the warmer experiment.

Summary Statement
My project tests the affect that temperature has on the chemical reaction with luminol.

Help Received
My science fair teacher helped me set up my board by cutting and gluing papers for me. I had a couple of students in my class assist me by stirring chemicals, while I started the stopwatch and took pictures.