CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY

Name(s)
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Project Number
35444

Project Title
Twinkie Resist

Abstract

Objectives/Goals
I did this test to see if Twinkies can resist water, similar to a store bought water resist for leather. I tested to see if my different Twinkie mixes stood up to water resist, or did not. I thought that if water resist can use any chemicals they want to get the best turnout, it is a bit of a public safety concern that an "edible" product may do the same job better.

Methods/Materials
Materials:
4 unfinished leather scraps
1 box of Twinkies
3 mixing bowls
wooden spoon
eye dropper/ water
boot water resist

I separated the Twinkies into just bread,just filling, and exactly one Twinkie. I made these into spreadable pastes and spread them on leather and had a water resist sample. I dried them before the tests. I did two tests where I timed how long it took to absorb water droplets off the leather's surface. I did one test after an hour of application, and one after a week.

Results
The Twinkies preformed much better than boot resist, and improved over time. The filling sample dropped off in time, but everything else increased effectiveness. The water resist did 2-3 times worse than the Twinkies at some points.

Conclusions/Discussion
My hypothesis has proven partially correct. I thought the various Twinkie mixes would not do better than the resist, but to my surprise, they did. I think that if I did this again I would not go into the test with little knowledge or a sure idea of how I was going to test the water solubility, and would really think about the whole process more. Right before the testing I decided that a blank leather scrap would not be necessary because I was not testing if the water resist and the Twinkie mixes worked, but instead only how well the types of Twinkies did compared to the resist. This blank sample was in my preparing photos.

Summary Statement
Twinkies have lipids,petrolium, and many other things that may resist water and I tested this property on leather against storebought water resist.

Help Received
Parents helped with original idea, and how to test the water absorbtion.