

CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

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Project Number

J1101

Project Title

Perfect Polish

Abstract

Objectives/Goals

To determine how ingredients in nail polish affect the durability or rate at which different nail polishes chip.

Methods/Materials

I chose five different brands of nail polish, four of which advertised as "longwearing". I analyzed the ingredients of each polish and found that one of the longwearing polishes contained Teflon. I then researched Teflon and found that it had unique qualities that could affect durability. From this, I formed the hypothesis that the polish that contained Teflon would not chip as fast as those without Teflon. The independent variable was the ingredient Teflon. The dependent variable was the number of days the polish containing Teflon could be worn without chipping. I applied each of the five polishes to the fingernails of my eight participants. I then observed and recorded the chips/scratches of each polish on each participant, every 24 hours.

Results

The results revealed that the polish containing Teflon, Sally Hansen Teflon Tuff, stayed on nails the longest without chipping or scratching. The one polish that did not advertise as longwearing, "Wet N Wild", chipped the fastest. Despite its relative strengh, the Teflon polish still only lasted on average 2.875 days as opposed to the 10 days it advertised.

Conclusions/Discussion

The unique qualities contained in Teflon actually strengthen nail polish durability.

Summary Statement

Our test showed that nail polishes that include the ingredient "Teflon" will last longer without chipping than those without Teflon.

Help Received

My parents help organize my thoughts