

SODA ERUPTION

C44

PURPOSE & HYPOTHESIS

The purpose of this experiment is to compare different types of candy and how it will erupt in diet coke. I am using Mentos as my control candy. Each Mentos has thousands of tiny pits on its surface. When a mint hits the soda, the pressurized carbon dioxide forms little bubbles on the candy surface.

I chose 3 other candies for my experiment. Nerds, Sour Patch Kids and Pep O Mint Life Savers. My hypothesis is that the Sour Patch Kids candy will explode the most because of the acid, then the Pep O Mint Life Savers because of the tiny holes on the surface like the Mentos and finally I think the Nerds candy will have the least amount of eruption because they are very tiny.

RESEARCH

- Ingredients. For Mentos. **Sugar, Wheat Glucose Syrup, Hydrogenated Coconut Oil**, Rice Starch, Natural Flavors, **Gum Arabic, Sucrose Esters Of Fatty Acids**, Gellan Gum, **Carnauba Wax, Beeswax**.
- The exact list of ingredients for Nerds. includes: **Dextrose**, Sugar, **Malic Acid, Corn Syrup, Artificial Flavors, Carnauba Wax** (a **palm wax**), **Carmine Color**, and dyes Blue 1, Blue 1 Lake, Blue 2, Blue 2 Lake, Red 40, **Red 40 Lake**, Yellow 5, Yellow 5 Lake, Yellow 6, Yellow 6 Lake.
- Life Savers Pep O Mints! Ingredients: **Sugar, corn syrup, natural flavor, stearic acid**.
- Ingredients. For Sour Patch Kids. **SUGAR,INVERTSUGAR,CORN SYRUP,MODIFIED CORN STARCH,CONTAINS LESS THAN 2% OF TARTARIC ACID,CITRIC ACID,NATURAL AND ARTIFICIAL FLAVOR,YELLOW 6,RED 40,YELLOW 5,BLUE 1**.

Diet Coke and Mentos eruption From Wikipedia, the free encyclopedia

A **Diet Coke and Mentos eruption** (also known as a **soda geyser**) is a reaction between the [carbonated](#) beverage [Diet Coke](#) and [Mentos](#) mints that causes the beverage to spray out of its container. The candies catalyze the release of gas from the beverage, which creates an eruption that pushes most of the liquid up and out of the bottle.

MATERIALS

Materials I used: 1 Liter of Diet Coke. Mentos, Nerds, Sour Patch Kids and Pep O Mint Life Savers, small empty water bottles.

EXPERIMENT

My experiment is to test different candies and to see which ones erupt the most using Diet Coke as my liquid. I was very excited to see which ones will erupt the most.



PHOTOS



Videos for Experiment



Videos for Experiment



ANALYSIS

Out of the 3 other candies for my experiment that I chose, the Mentos did not erupt as much as the Pep O Mint Life Savers. The order that erupted the most to the least were, Pep O Mint Life Savers, Mentos, Sour Patch Kids and Nerds.

CONCLUSION



REAL WORLD CONNECTION

My experiment is related to volcanic eruptions that are natural disasters. I can see how my candies erupted in the diet coke as lava erupts from a volcano.

WORKS CITED

Education.com for my experiment. Wikipedia in my research. And Google in my research.