

Homemade Pop Rocks Turn Your Kitchen Into a Fun Science Experiment

Source: <https://www.mybluprint.com/article/homemade-pop-rocks-just-might-blow-your-mind>

By Jessie Oleson Moore

Yes, it is possible to make Pop Rocks, the famously fizzy candy, right in your own kitchen. No, you don't need any special equipment or a science degree. This at-home version of the classic candy attains its magical fizz through a combination of citric acid and baking soda. Time for a fun kitchen experiment!

DIY Pop Rocks

Level: Easy

Recipe adapted from [The Daily Meal](#)

What You Need

Ingredients

- 3 tablespoons confectioners' sugar
- 1½ teaspoons baking soda
- ¼ cup plus 2 teaspoons citric acid, divided
- 2 cups granulated sugar
- ⅓ cup honey
- ⅓ cup water
- Gel or liquid food coloring (your choice of color)

Tools

- [Baking sheet](#)
- Small bowl
- Spoon for mixing
- Whisk
- Candy thermometer
- Saucepan

Instructions

1. Prep the Baking Sheet

Thoroughly coat the bottom of a rimmed baking sheet with the confectioners' sugar.

2. Mix Baking Soda and Citric Acid

Combine the baking soda and ¼ cup of the citric acid in a small bowl, and mix gently to combine. Set aside.

3. Heat

Clip your candy thermometer to the side of a large, heavy-bottomed saucepan, or have your instant-read thermometer ready. Place the sugar, honey and water in the pan. Stir to combine. Place the mixture over medium heat.

The mixture will progress from quite sandy to liquid to vigorously bubbling. Once it starts bubbling, begin monitoring the temperature closely. When the mixture reaches between 295 and 300 F, remove from heat.

Pro Tip

If at any point you notice granules of sugar sticking to the sides of the pan, brush them down with a slightly wet pastry brush.

4. Whisk

Immediately stir in the baking soda and citric acid mixture and the food coloring. Whisk until everything is combined. Work quickly, as the candy will begin to set rapidly.

5. Spread on the Baking Sheet

Pour the candy onto your prepared baking sheet and try to coat the sheet evenly. Sprinkle the top of the candy with the remaining citric acid right after spreading. (It won't stick once the candy sets.)

Good to Know

Don't worry if your candy layer looks uneven or ugly in the pan, or appears speckled by spots of sugar or citric acid. You will literally be crushing it in the next step, so the visual appeal isn't too important at this point.

6. Let It Set

The candy will set rather quickly, between 20 minutes and an hour depending on the heat and humidity in your kitchen. Break off a corner; if it's brittle and breaks easily, you're ready to move on to the next step.

7. Break It Up

Break the candy into large shards to make it easier to handle, then transfer it to a large freezer bag or divide it between two bags. Force out any extra air and seal the bag(s). Gently roll a rolling pin over the candy mixture to crush it.

Store in airtight containers at room temperature, away from direct sunlight.

Popping the Questions

Answers to your most frequent pop-rockin' questions.

Is Citric Acid As Scary As It Sounds?

No, it's not going to burn a hole through your spoon. It's simply a fermented citrus by-product that's used as a flavoring and natural preservative.

That said, citric acid can be tricky to find — not because it's rare, exotic or expensive (we bought it for less than \$2), but because different stores stock it in different areas. You might find it with the canning supplies or in the baking aisle, and while you may not see it at all grocery stores, your local superstore (Target, etc.) is likely to carry it. You can also buy it online.

Do I Really Need a Candy Thermometer?

Yes. It doesn't have to be a fancy one, but you'll need to be able to monitor the temperature of the candy to ensure it will set firm.

Is There a Substitute for Honey?

Yep! If you don't like honey, you can always swap in the same amount of corn syrup.

Photos and artwork via CakeSpy

How does Pop Rocks candy work?

Source: <https://science.howstuffworks.com/innovation/science-questions/question114.htm>

"Pop Rocks" is an extremely cool candy to some people, but to other people it is just plain weird and they won't touch the stuff. Regardless of which view you subscribe to, you have to admit that it is definitely a technology candy -- nothing in nature works like Pop Rocks do!

So how do they work? One of the amazing things about Pop Rocks is that they are [patented](#). That means that you can go read the patent and see exactly how they work. You can [click here to see the patent](#) -- this page is a synopsis, and if you click the "View Images" tag at the top of the page you can look at scanned images of the actual patent. Page 4 is the key page.

Here's the basic idea. Hard candy (like a lollypop or a Jolly Rancher) is made from sugar, corn syrup, water and flavoring. You heat the ingredients together and boil the mixture to drive off all of the water. Then you let the temperature rise. What you are left with is a **pure sugar syrup** at about 300 degrees F (150 degrees C). When it cools, you have hard candy.

To make Pop Rocks, the hot sugar mixture is allowed to mix with **carbon dioxide gas** at about 600 pounds per square inch (psi). The carbon dioxide gas forms tiny, 600-psi bubbles in the candy. Once it cools, you release the pressure and the candy shatters, but the pieces still contain the **high-pressure bubbles** (look at a piece with a magnifying glass to see the bubbles).

When you put the candy in your mouth, it melts (just like hard candy) and releases the bubbles with a loud POP! What you are hearing and feeling is the 600-psi carbon dioxide gas being released from each bubble.