

# Instructions for use

The MY POP OLD FASHIONED SODA SHOPPE is an environmentally green product. With this product you can reuse glass seltzer and plastic soda bottles many times. In addition to helping to save the environment there are no bottle recycling taxes, there are no politically added sin taxes and in many places that do not tax foods, no sales taxes you are forced to pay just to make bubbly water. This MY POP OLD FASHIONED SODA SHOPPE has been pressure tested and then vacuum packaged. The fittings are high quality precision parts capable of providing a long life if they are not abused. Unscrew one bottle (in the bag) it makes no difference which one. Blow into bottle if needed to pop bottle into normal shape. Fill with two teaspoons of bakers' yeast, a cup of white sugar, add water. Leave a 3 inch air space inside the top of the bottle for shaking. Place palm of hand over opening and shake to mix ingredients. This should yield enough carbon dioxide to carbonate up to five 2-liter bottles over the course of a week's time. **To prevent the tubing from twisting, screw the bottle into the cap while keeping the cap from rotating.** Normally the center pinch clamps are open and the pinch clamp for filling the soda bottle is closed. The six assembled bottles fit in The MY POP OLD FASHIONED SODA SHOPPE carrying bag. The tubing with the pressure gauge and the tubing with the closed pinch clamp and **blue male fitting** hang outside the bag for ease of use. **Assemble all tubing connections finger tight. Hand tighten the bottle caps.**

Within a day you should hear popping sounds as the bottles fill with gas. The bottles were vacuum packaged to fit into the box, also it sounds neat just for the first time to hear that the yeast are making carbon dioxide. After a few days all the bottles will feel equally firm, the pressure gauge will rise. Yeast sometimes take longer to get started please be patient. When the pressure gauge reads 30 psi or more you can carbonate your cold water soda bottle. Leave a 3 inch air space inside the top of the bottle for shaking. Connect the 1/4 turn soda bottle connector to the **blue male luer**, open the pinch clamps. Shake the soda bottle, you will be done when you shake for 1 or 2 minutes or the pressure gauge drops by 10 psi which ever comes first. Close the two pinch clamps and unscrew the 1/4 turn luer connection. Excess carbon dioxide results in a swoosh sound when opening the soda bottle. Water can hold only so much carbon dioxide the rest escapes. **Wait a few minutes before opening if the soda is foamy.** Use the pinch clamp on the soda bottle tubing as needed to vent the excess gas slowly through the tubing before opening. Everyone has experienced the mess that a pressurized soda can make. After opening use a regular soda cap to reseal (one is included in package).

When making soda the pressure gauge will be reduced by approximately 10 psi if you are using a 2-liter soda bottle for carbonating. Here again these are just estimates they depend on the temperature of the water used and how much shaking you do. Most every drink will foam when shaken, this speeds carbonation time. **Plain water does not foam so you will have to shake longer. Speed things up with higher pressure and colder water. The colder the water is in the soda bottle the more carbonation one will obtain.** Room temperature drinks will not carbonate well. In general after one or two minutes of shaking no more bubbles will be seen entering the 2-liter soda pop mixture. Small bottles carbonate much faster.

After a week or so, no more carbon dioxide will be generated from fermentation. The pressurized carbon dioxide in the 6 bottles should last for weeks. If the pressure gauge shows less than 20 psi it is time to refill. Unscrew the spent reactor bottle, you can use the **blue male luer** fitting to screw inside the bottle cap to save residual gas in the system. Pour contents down the sink. Refill with fresh yeast, sugar and water.

## Carbon Dioxide Pressure

Using one reactor bottle, with one cup sugar and two teaspoons of baking yeast (standard packet) and filling with water leaving a 3 inch air space inside bottle; you should expect to see the pressure gauge read when using 5 bottles as a gas reservoir room temperature 75-90 degrees: 1 day = 10 psi, 2 day = 20 psi, 3

day = 30 psi, 4 day = 40 psi, 5 day = 50 psi, 6 day = 60 psi. **Baker's Yeast ferment sugar fastest at 104 ° F and 15 times slower at 50 ° F.**

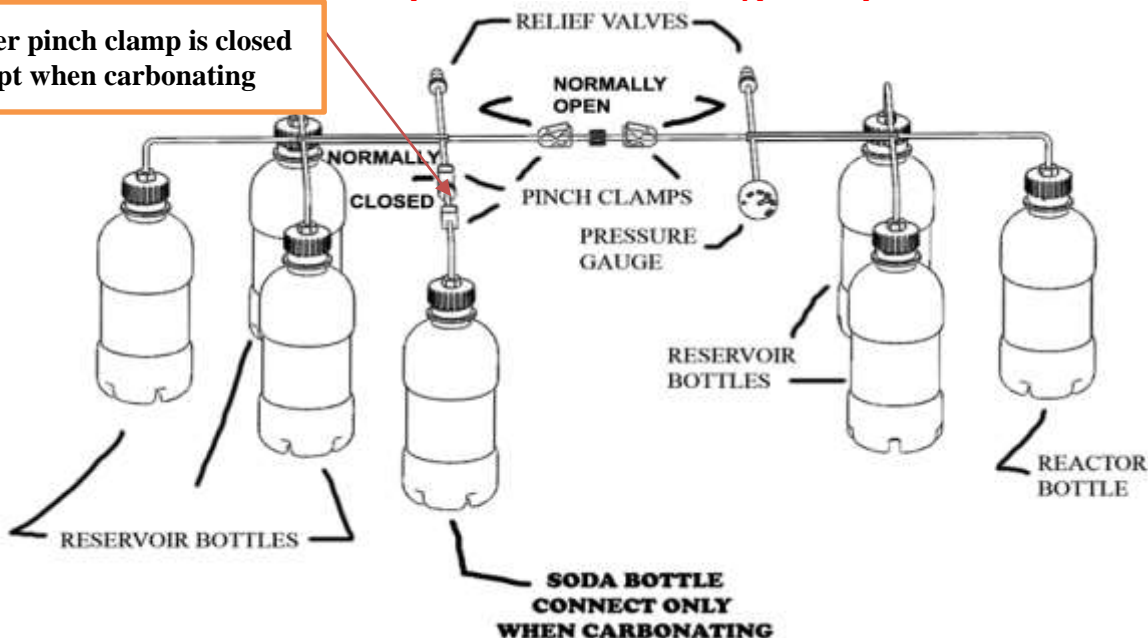
These numbers are just an estimate. They are dependant on the quality of the yeast and the temperature of the room and whether you have a system leak. **If the yeast is not fresh and/or if the room temperature is cold it will take longer to pressurize.** The MY POP OLD FASHIONED SODA SHOPPE can store ideally all the carbon dioxide generated from a single reactor bottle starting from zero pressure. Making two or more reactor bottles will speed things up but excess pressure will vent. The yeast die as the fermenting mixture builds up alcohol, any excess sugar is wasted. Adding more yeast will speed up the process somewhat but will not result in more carbon dioxide generated. Once the system is pressurized, carbonation occurs very quickly when you shake the cold water receiver bottle that is connected to The MY POP OLD FASHIONED SODA SHOPPE

## Cleaning, Safety, Performance

During the fermentation process some foaming will occur. Adding too much water to a reactor bottle will result in allowing the foam to enter the tubing and reservoir bottles. This is not a short term problem but you will want to clean out the bottles and tubing at the end of the week for cleaning, and performance sake. The build up of material in the tubing tends to make the relief valves stay open at a lower pressure resulting in carbon dioxide loss. Clean out the system every month. Unscrew bottles and wash them. Fill syringe with water. Open the pinch clamps. Unscrew relief valves and pressure gauge from tubing. Connect the water filled syringe to the tubing assemblies to clean the tubing. Refill syringe as needed. Connect relief valve to syringe. Press syringe plunger down firmly against table to push water through relief valve. Repeat for other relief valve. You will see water dripping out the relief valve when it opens. Push a few ml of water through the relief valves. There are two relief valves in The MY POP OLD FASHIONED SODA SHOPPE. Under normal operating conditions when the center pinch clamps are open, either relief valve opening will result in maintaining system pressure. A slow leak at 40 psi or above is acceptable for the relief valves. **It is possible you may not have tightened the bottle caps, or you left the pinch clamp near the blue luer open if you cannot pressurize the system.** Check for leaks by dipping each component part one at a time in a 1 gallon bucket of water. Squeeze a bottle to temporarily generate pressure. Only the bottle cap part of the bottle is needed to check for a leak. A leaking part will show a continuous bubbling when held under water. If bubbles are seen coming from a cap tighten the cap. If bubbles are still escaping the bottle cap has to be unscrewed. Screw **blue luer** fitting inside cap and hold **blue luer**. Use a plier and tighten top nut one third of a turn (This is a rare event). **Use only white sugar, baker's yeast and water in the reactor bottle. The correct system pressure is meant to stay below 80 psi. Do not run The MY POP OLD FASHIONED SODA SHOPPE without operating relief valves. Do not add additional components. Relieve pressure, clean system, and purge relief valves every month. Replace cracked bottles and system components when needed. Replacement parts available [www.mypopsoda.com](http://www.mypopsoda.com)**

***Parental Supervision required when using this product.***

Blue luer pinch clamp is closed except when carbonating



The reactor bottle can be any one of the six bottles that stay in the MY POP OLD FASHIONED SODA SHOPPE bag.

## Recipes

In general a 2-liter soda bottle contains a cup of sugar. Ginger ale and orange flavor drinks usually contain slightly less. Sweetness is a matter of personal taste. Soft drinks were in the past made only with sugar. Soda companies today try to save money by substituting high fructose corn syrup, which most everyone agrees is not as tasty. **You can use sugarless low calorie sweeteners in your soda if you desire.** Non-sweetened Koolaid® and Wylers® brand flavors work very well and cost around 20 cents for a package. When using one standard package add one cup of sugar in a 2 -liter bottle. Vanilla extract (for cream soda) and Zatarains's® root beer extract works well when using around 10 ml (2 teaspoons). Use the enclosed syringe and try it for yourself. ***You can keep soda bottles containing sweetener, flavor, water and air in the refrigerator ready to be carbonated when you have 30 psi or more pressure.***

There are many flavors to choose from but these work well, they combine smell, taste and color in a low cost package. Any commercial flavoring you like is fine. For home use, extracts or powders are a good way to go.

If you intend to make a lot of soda then you can save money by buying yeast in a restaurant supply house such as Smart & Final® and Costco®. A 2 pound package of active dry yeast costs around five dollars. Using two teaspoons at a time this is enough yeast for 128 reactor bottles. You will be using less than 4 cents of yeast per bottle. When buying a single serve package at a supermarket you can pay over 50 cents! Sugar comes in 1, 5, 10, 25 and 50 lb bags. Sugar costs less per pound in larger containers. A cup of sugar weighs ½ pound. Sugar costs around 40 cents per pound in a large bag so you will be paying 20 cents to sweeten your 2-liter soda.

Carbonation strength is a matter of personal preference as well. The last drink of soda always contains less carbonation than the first drink. You can recarbonate your half empty bottle using The MY POP OLD FASHIONED SODA SHOPPE and get the high fizz back. The colder the water the more carbonation you will obtain.

## Fruit Drinks

Apple, Grape, Peach, Pear, Strawberry, Guava drinks can benefit from carbonation. Acid drinks such as Lemon, Orange and Pineapple juices normally taste sour, they become extra sour when carbonated. Adding less acid flavor may help balance the beverage.

## Milk & Cream

Making foamy milk shakes is easy. Shake a ½ liter soda bottle containing your favorite chilled milk drink and it will be carbonated the same as water. Remember to leave an air space for shaking. Turning cream into whipped cream is easy. Whipped cream actually contains a lot of sugar. Look on the cream container for their recipe. You can use a ½ liter soda bottle, leave enough air space to shake, use cold cream and carbonate the mixture. Making whipped cream involves unscrewing the cap in a deep bowl quickly and watching the carbonated cream mixture instantly turn into whipped cream. Here you want to release pressure very quickly. Watch out for flying whipped cream if you do not aim it down into a deep bowl! Clean out the cap, tubing and bottle afterward using soap and water.

## Wine Coolers/Champagne

Ordinary store bought wine in the 5 liter pouch is around 9 – 10 % alcohol. Dilute 1 pint chilled wine with 2 pints chilled water. Add  $\frac{3}{4}$  cup of sugar to make a 3% alcohol wine cooler when carbonated in a 2-liter bottle. You have made a wine cooler for  $\frac{1}{4}$  of the price. You will want to adjust the sugar needed depending on your preferences. “Dry” in wine terminology means less sugar. The contents of a chilled previously opened bottle of expensive Champagne can be refreshed, by pouring it into a soda bottle. Connect The MY POP OLD FASHIONED SODA SHOPPE and shake for 1 – 2 minutes. For adults only.

## Water Gun/Mister

Attach the siphon tube to the underside of the soda cap assembly. The siphon tubing length is sized for a 2 liter bottle. Angle cut the tubing end to fit in smaller bottles. Carbonate ice cold water and then close the pinch clamp, let the carbonated water warm up to room temperature. **You have a powerful water gun that can spray a stream of water over 15 feet.** Using the misting attachment can create a pleasant cooling sensation on a hot day. Attach the mister attachment to the water gun female luer and you can have 2 liters of misting water which should last for an hour of misting. In use you will want to cycle the misting by using the pinch clamp as needed. **Use only clean water and tubing or the mister will clog. A clogged mister will need to be replaced. Spare parts and replacement parts available through [www.mypopsoda.com](http://www.mypopsoda.com)**

## Health

**All home carbonated drinks will spoil, even those made with THE MY POP OLD FASHIONED SODA SHOPPE. Keep drinks refrigerated, your drinks are not pasteurized, but will keep as long as normal opened drinks do when kept in the refrigerator. Cold soda should keep for weeks, for milk products observe expiration dates. Misting and water gun applications use only water and carbon dioxide, this should be as safe as a normal mister or water gun filled with water. Clean and refill after a day or two.**

## Adult Supervision

**The MY POP OLD FASHIONED SODA SHOPPE is recommended for ages 10 & Up with adult supervision. We use plastic soda bottles rather than glass bottles as they do not shatter if dropped.**

## Helpful Hints

1. If you wish to use other soda bottles with the My Pop Old Fashioned Soda Shoppe remove the left over plastic or metal ring on the bottle. Use only normal full cap height soda bottles. COKE® brand mini bottle cap soda bottles smaller than 1 liter will not fit.
2. System will pressurize faster on warm days and nights. Beverage carbonating occurs faster when the system pressure is higher and the beverage temperature is colder.
3. The most common problem a new user may experience is not realizing there is a system pressure leak. Read the Cleaning Safety and Performance section.