

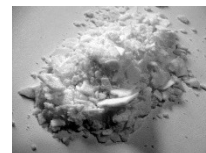
How to make  
**Chlorine Dioxide**

Materials and process  
As of 1 November 2021

**Ingredients (2) :**

**Sodium Chlorite 80%** - made by Stellar Chemical Corporation comes in different size containers. A 100 gram bag, like the one shown, will make enough chlorine dioxide to treat for one person prophylactically for about 3-5 years and can be ordered through Amazon for about \$9.00. It comes in a resealable bag. Keep sealed when not in use.

It comes in a flake form and can be made into more of a powder with a spoon and small bowl. This will make the material dissolve more quickly.



**Citric Acid** - can be purchased at Walmart for about \$6.00. A 14.8 oz. bottle will make enough chlorine dioxide to, again, prophylactically treat for one person for about 3-5 years and already comes in a dry powder form, ready to use. It has a shelf life of about two years.



**Items Needed (6) :**

**Measuring Spoons** – As close as realistically possible to 1/16 teaspoon and 1/8 teaspoon will be necessary to measure out the sodium chlorite and citric acid. A 1/2 teaspoon measure will be needed to measure out boiled distilled water to add to each of the 2 glass containers of sodium chlorite and citric acid that will be described in the “process” section. Most standard measuring spoon sets have a 1/2 teaspoon, 1/8 teaspoon, but not a 1/16 teaspoon. Measuring out about half of a 1/8 teaspoon will be adequate for the purpose of making chlorine dioxide.



**500ml Glass flip top canning jar** – A good quality maximum 500ml glass flip top canning jar with a rubber seal and (suggested) stainless steel bail to help prevent rusting. The size of the jar is important because the sealable jar, 350ml of distilled water and 2 5/16” tall shot glass are all integral components of the chlorine dioxide making process.



**2 - 1oz Glass mini-measure shotglass** – At least one 1oz mini-measure shot glass, measuring a minimum of 2 5/16” tall and a separate small glass container, or 2 shot glasses. The 2 5/15” is critical as you will see in the description of the chlorine dioxide making process.



**Standard Glass measuring cup** – A standard household glass measuring cup that can be used to, both, boil some distilled water to dissolve the powdered chemicals and pour 350ml of room temperature distilled water into the glass canning jar. It can be larger, that is fine.

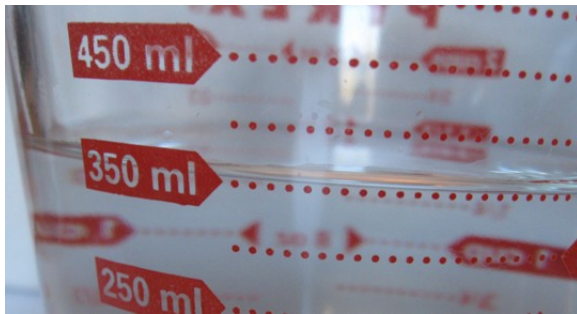


**Sealable Glass jar** – A sealable glass jar for storage of the final solution in the refrigerator. A mason jar or similar jar is often used.



## The process for making Chlorine Dioxide

**Step 1** – Pour 350ml of room temperature distilled water into the 500ml glass canning jar. An alternate method is to place the mini-measure shot glass in the canning jar and pour room temperature distilled water into the canning jar up to the top of the red line on the shot glass. This is one reason that the size of the canning jar and shot glass are so important. Be careful not to pour any of the water into the shot glass.



**Step 2** – If the alternate method is used, remove the shot glass and dry it completely.

*For the purposes of this work instruction guide, we will use 2 of the mini-measure shot glasses.*

**Step 3** – Place 1/8 level teaspoon of the citric acid in one shot glass.

**Step 4** – Place 1/16 level teaspoon of the sodium chlorite in the other shot glass.



**Step 5** – Boil about a half cup of distilled water in the microwave oven and add ½ teaspoon of the boiled water to each of the shot glasses and stir each with a non-metallic (i.e. plastic) spoon or straw until the powders are completely dissolved.

**Step 6** – Pour the citric acid shot glass into the sodium chlorite shot glass as stir a little. The mixture will turn yellow.



**Step 7** – Carefully set the mixture shot glass into the canning jar and secure the lid.



**Step 8** – Let the whole thing sit (cook) for 12 hours.



**Step 9** – After the 12 hours of cooking is completed, open the lid, lift the shot glass straight up and out of the yellow chlorine dioxide solution.



**Step 10** – Pour the chlorine dioxide solution into a glass or ceramic container (mason jar works fine) with a sealable lid and store in the refrigerator.



**Step 11** – Rinse the chemical components in the shotglass out in the sink and wash the shotglass and 'cooking' jar as normal.