

## Home Made Carbon Dioxide Tutorial

Well after asking around and finding the simplest methods I came across a real easy way of making home made  $\text{CO}_2$  (thanks to *skunkishybrid* and *m420*) and i've illustrated it aswell, just thought i'd help a few of you out there who are new to this like myself.

*When plants photosynthesise to make energy and grow they use **Water (H<sub>2</sub>O)** and **Carbon Dioxide (CO<sub>2</sub>)** plus **Light**. They use half the amount of Carbon Dioxide to the amount of Water they use so this is alot of Carbon Dioxide if you think about the amount you water them, so giving them a boost of Carbon Dioxide during growth would be an advantage.*

So here's my guide on how to make your own little amount of Carbon Dioxide to give your plants the boost they would love.

### Step 1.

Obtain a bottle of any size, preferably plastic and fill it half way with water



**Step 2.**

Peirce the plastic lid using a hot pair of scissor or a pin



**Step 3.**

Make a funnel, either using some card or paper or grab a funnel from your kitchen





**Step 4.**

Get some yeast, doesn't really matter what sort of yeast as long as it's active.. This only cost me £1.50 Sterling so probably about \$2-\$3

**Step 5.**

Get some sugar or glucose, I've used sugar but glucose is cheaper, just get what you can get your hands on



**Step 6.**

Put about 1/5th of sugar to water in your bottle and the same for the yeast, 1/5th, it doesn't really matter so long as you have a decent enough amount

**Step 7.**

Ensure that your water has gone cloudy and remove your funnel and put the lid back on your bottle

**Step 8.**

I've used about this much yeast/sugar mix at the bottom of my bottle





**Step 9.**

Cover the hole at the top of your bottle and shake well and continue to shake regularly for the next 48 hours to start off the reaction



**Step 10.**

Leave to stand for a second and pretty much straight the way bubbles should be on the top, this is the Co<sub>2</sub> being given off

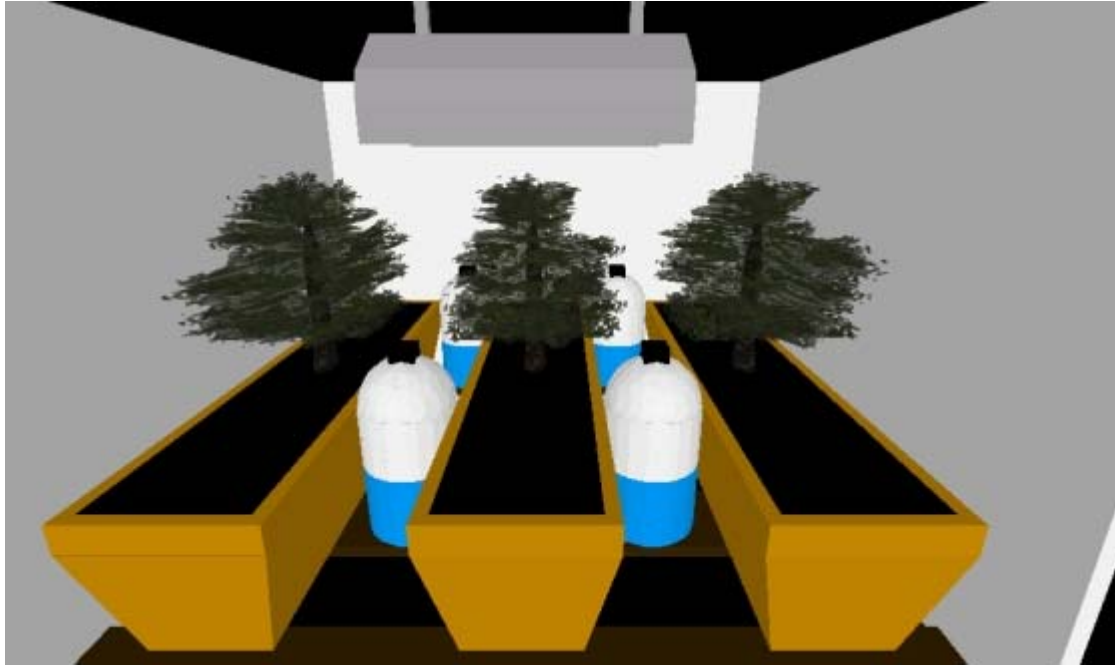




### **Positioning**

The bottles should be ideally placed at pot height, because from what I remember from chemistry Carbon Dioxide is lighter than air, because air contains so much nitrogen which is a heavy (Carbon = 12 atomic mass / Nitrogen = 14 atomic mass) so if place at pot height the Carbon Dioxide will rise into the plants leaves and stem where the photosynthesis occurs

this is a 3D image of how mine are setup



### **Finally**

Hey presto, everytime you want to give your plants a little boost of Carbon Dioxide the cheap way! Just shake up the bottle and stand it next to your beloved plant. For greater Carbon Dioxide production, use a bigger bottle. If no more bubbles are produced after shaking your bottle then it means you need to add more sugar, if no more bubbles are produced after the sugar has been added then more yeast must be added to the solution.

Much lurve.

Paul 🍷