Hays PureWater for All

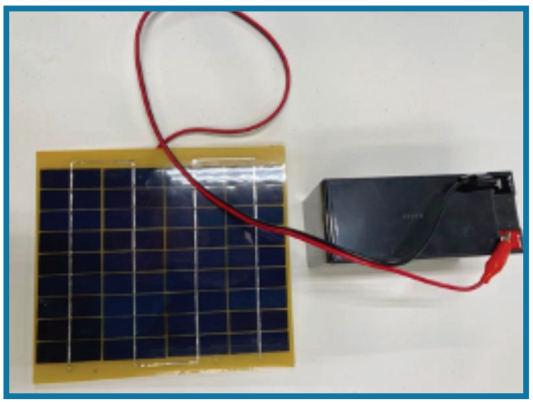
INSTRUCTIONS FOR MAKING PURIDE

1. Supplies needed for teaching: A small table and a 20-liter container or 5-gallon bucket of their water, 3 - 1/2-liter bottles. One bottle end can be cut off making it into the funnel and the other two bottles are used to make chlorine.

2. Lay out the entire kit on the table.

3. Display the solar panel and 12-volt battery.

4. Hook the solar panel to the battery. Tell them the battery is 12-volt DC, the same as a motor cycle, car or truck battery.



5. After each use connect the battery to the solar panel and place the solar panel in the sun to recharge the battery. The solar panel will not overcharge the battery. The solar panel and battery should not be used for any other purpose. If the battery or solar panel get lost, stolen or broken then a car or truck battery or another 12-volt power source can be used. The battery does not have to be removed from the car or truck to be used.

6. Display the Chlorine generator. Remove the regulator nipple and show them that it has 2 plates inside. One is silver the other is black. The regulator nipple always goes on the silver end. The funnel always goes on the black end.



7. Demonstrate how to put the O-ring on the funnel. If the O-ring breaks or gets lost use something else to seal the threads. A plastic bag will seal the threads. If the funnel breaks then make a new one from a plastic bottle.


8. Using 2- 1/2-liter bottles take one and fill it with water. Using the cap from the 1/2-liter bottle fill it with salt and pour 2 caps of salt into the water. Shake the bottle and make a salt water brine solution. Ocean water can be used without any alterations.

9. Connect the CPU to the battery. Red to Red or positive +. Black to Black or negative -.

10. Insert the regulator nipple into the empty 1/2-liter bottle.

11. Pour the salt water brine into the funnel of the CPU. Bubbles should be vigorously rising in the funnel. Ex-plain the bubbles are Hydrogen gas and that they are extremely flammable.

12. Have a volunteer come and smell the chlorine being produced.

13 Ask what are the 3 things that could be wrong if no bubbles are present. This step is important it gets them to learn how to problem solve. 1. Battery is discharged 2. Bad connection or broken wire. 3. No salt was added to the water.

14 Pass the salt water brine through the unit 4 times. The screw head that is on the top side of the unit and con-nects the Red positive wire to the plate inside the unit is able to tell us if too much salt is present in the brine. If the screw head is too hot to hold your finger on then the amount of salt can be reduced. Some experimenting with ra-tios may be necessary.

15 Ask what should be done if you lose count while making Puride. Tell them to pass it through 1 more time. It is better to pass it through one too many times than not enough.

16 After the last pass disconnect the Chlorine generator from the battery. Rinse the unit out with a little water and store the unit in a safe place.

17 After some time the plates may get coated with mineral deposits. Show them how to hold their finger over the regulator nipple and fill the chamber with Cocoa Cola. Keep the Coke inside the unit for 1 or 2 minutes then drain the unit and rinse it. If the mineral deposits are still there submerging the unit in Coke for 1 hour.

18 Take the bottle of Puride and show them what was simple salt water is now a combination of Hydrogen Perox-ide, Ozone and Chlorine.

19 Explain that now you are going to purify the 20 liters (5 gallons) of water. Take the cap off the liter bottle filled with Puride and pour up to 10 cap full or more of Puride into the 20 liters (5 gallons) of water. Each capful is 10 milliliters. Or each 20 liters of non-potable water requires up to 100 milliliters or more of Puride depending on chlorine demand. Stir the Puride into the water. Adjust the amount of Puride for different size containers and water quality. A liter bottle of Puride will disinfect up to 500 liters of water under normal circumstances.

20 Take a chlorine test strip and stir the water with the test strip to collect chlorine. Pull the test strip out of the water after a few seconds. The test is the same for larger amounts of water like a 500-liter tank for instance.

21 Show them how dark the test strip turned. Teach them that 1-5 parts per million is required to disinfect the water. Free chlorine is desirable to keep the water dis-infected as well. The free chlorine test is the inner test paper patch.

22 Add more Puride to the water until 5 PPM is indicated on the test strip. Wait several hours before it will be safe to drink.

23 Teach them that the test strips are for training purposes and that after several times the amount of Puride should be the same as previous buckets.

24 If the water is overdosed tell them to give it time and the Chlorine will dissipate.

25 Puride is safer and more effective than bleach. Because the Hydrogen Peroxide and Ozone are 3 times more pow-erful than Chlorine. It not only kills bacteria and viruses but also parasites.

26 It has a shelf life of 2 weeks in a container with a lid that seals. After the 2 weeks are up either use it as a clean-ing solution or run it through the Chlorine again. Store the Puride in a safe place away from children.

Uses for Puride other than disinfecting water

- Take 1-part Puride and 10 parts water and use it as a hand sanitizer. I demonstrate then send the bottle around the room for everyone to use.
- Use the hand sanitizer to disinfect the cutting board or butcher block and knives.
- Put a cap full of Puride in the dish water while washing dishes.
- Add some Puride to the mop water and the water used to wipe down tables and chairs etc. Anything that is be-ing wiped down can benefit from Puride.
- Add 2 - 4 capfuls of Puride to the bath water.
- Use Puride in the laundry. Be careful not to spill any on colored clothes since it could bleach the color out.
- Use full strength on cuts and scrapes as an anti-septic. Do not use in or near the eyes.
- Rub Puride on the skin full strength to repel mosquitos.