

How to Make a Solar Bottle Light Bulb

Source: pinoybisnes.com

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A solar bottle light bulb, an innovation introduced in the Philippines by Illac Diaz of MyShelter Foundation, as a cheap alternative to other light sources. It was an ingenious invention by an engineer in Brazil. It is called “**bottle bulb**” because it is made of an empty 1.5 liter soda bottle and in it is a liquid bleach and purified water that can be used as an alternative electric powered light bulb. However, it is only useful during daytime but its luminance was tested and shown to produce as much light as a 50W incandescent bulb.

How to make your own Solar Bottle Light Bulb?

The materials are the following: 1.5-liter soda bottle, 1’x1’ roof sheet material, purified water, camera film dispenser, chlorine and a rubber sealant.

Procedure:

Step 1. Fill the 1.5-liter clear soda bottle with purified water then add 3 tablespoons of liquid bleach and tightly seal the cap. Do not use tap water because this will allow the growth of moss.

Step 2. Make a hole in the 1’x1’ roof sheet material, just the same size of the bottle’s circumference and insert the bottom part of the bottle leaving it exposed under the sunlight.

Step 3. Next, make another hole on the roof of the house (same as the bottle’s circumference) where you want to put the solar bulb and firmly fix the device.

Step 4. Seal the roof with a sealant to prevent raindrops from getting inside the house. It will produce a light when the water inside the bottle bulb refracts and scatters the light inside the house.

The solar bulb is expected to last up to two years before it needs changing.

Watch the video of Solar Bottle Bulb from GMAnews.tv

Click here to watch “News to Go - Solar bulbs light up Laguna community 3/11/11”:
<https://youtu.be/9ISLKlalwX4>

In “Serbisyo on the Go,” Kara David visits a community in Laguna where residents are having a hard time paying their electricity bills. To keep power costs down, social entrepreneur Illac Diaz and the Rotary club taught residents how to make “solar light bulbs” using plastic soda bottles, water, and bleach.
