

**Continued from previous page**

If the solution is not being drawn up through the siphon, the reason could be that there is too much back-pressure. To find out if the problem is your set up or the Hozon, test the Hozon by putting the Hozon with the attached black tube on the faucet. Place the black tube (with spring) in a cup of water. Run the faucet with just the Hozon attached. The hose is NOT connected for this test. If water is siphoned then the Hozon works and the problem is external to the Hozon. If water is not siphoned and the Hozon has worked for you in the past, the stem has become clogged with fertilizer salts. Pull the black tube off and put the entire brass piece into a container and fill with vinegar and let sit overnight. The vinegar will dissolve the salts and the Hozon should work like new. To prevent this, allow the Hozon to siphon clean water through the black hose to clean out the stem.

For added protection, turn off the faucet when not using the siphon mixer, otherwise some dripping will occur. Turning off the faucet when not watering will help eliminate this problem.

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## Liquid Measure

- 50-60 drops = 1 teaspoonful\*
- 3 teaspoonfuls\* = 1 tablespoonful\*
- 2 tablespoonfuls\* = 1 fluid ounce
- 8 fluid ounces = 1 cupful
- 2 cupfuls (4 gills) = 1 pint (16 oz.)
- 2 pints = 1 quart (32 oz.)
- 4 quarts = 1 gallon (128 oz.)
- \* level spoonfuls



**Manufacturer & distributor of greenhouse products**

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# Hozon™

## BRASS SIPHON MIXER

*With Backflow Preventer*



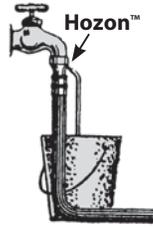
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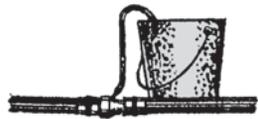
## Hozon™ Instructions for applying soluble fertilizers easily and accurately



As water passes through the siphon, it draws up the concentrated solution, diluting it with fresh water in the hose.

**Hozon requires over 3 gallons per minute to siphon.** Always use less than a 50 foot hose or attach the Hozon in-between two sections of hose. Any length hose can be used before the Hozon. Hoses smaller than 5/8" are too restrictive to allow the Hozon to work. We have found

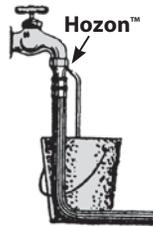
the following to restrict the water flow below 3 gallons per minute: trigger nozzles, impact sprinklers and drip irrigation.



We have found or been told by customers that the following products allow the Hozon to siphon: Water wands with Dramm's 170 water breaker. Other water breakers will

work, but the water will pour out of the breaker instead of a shower. We have been told that Dramm's One Touch Shower and Stream nozzle works with the Hozon and we

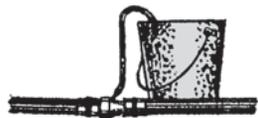
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work, but the water will pour out of the breaker instead of a shower. We have been told that Dramm's One Touch Shower and Stream nozzle works with the Hozon and we

have used Oscillating sprinklers with good results. Your results may differ depending on your flow and pressure. Always use the Hozn with the faucet all the way on.

The Hozon can also be used at the end of the hose, just before the nozzle. This allows the Hozon to mix the fertilizer between the hose end and the nozzle. A small container can be carried with the concentrated solution.

The Hozon will draw one gallon of concentrate in about five minutes and this will be mixed with approximately

16 to 18 parts of water through the hose, depending on the flow rate. A larger diameter hose, i.e. 3/4" instead of 5/8", will give a larger flow rate.

**The Hozon should be no more than fifty feet from the nozzle end to work correctly.**

**How to prepare concentrated solution:**

Under most conditions the concentrated solution should be made at 16 times the recommended rate. If you need an exact dilution, the Hozon should be tested in the setup you want to use to see the dilution rate your Hozon will give you. Use a measuring cup in the 6 cup range. Fill with water and drop the suction hose in. Use the same setup as you will use to water/fertilize your plants with. Fill a 5 gallon bucket. Make sure you do this near the faucet as shutting the water off at the end of the hose might send



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water back into the concentrate container. When the 5 gallon bucket is full, shut off the water and note how much water was sucked out of the 6 cup measure.

Take 640 (128 ounces to a gallon, 5 gallons times 128 equals 640 ounces in 5 gallons) and divide by the number of ounces sucked out of the measuring cup. This will give you the second number to the 1:X ratio. For example, if a Hozon sucks 35.5 ounces out of the measuring cup after filling a 5 gallon bucket, it will be injecting 1:18 (640 divided by 35.5).

Times the fertilizer rate by the second number of the ratio to get the amount of fertilizer to put in a gallon of water to make the concentrate that the Hozon will siphon.

Example: If a fertilizer recommendation is 2 table-spoons per gallon for hand watering and your Hozon rate is 1:16, you would make the solution at a rate 16 times greater than the 2 tablespoon per gallon rate.  $16 \times 2 = 32$ , so 32 tablespoons per gallon would be the concentrated rate. When mixed with water from the hose, the solution will come out the hose end at the recommended rate of 2 tablespoons per gallon.

Another option is to determine the area to be covered and the amount of fertilizer needed to cover that area. For instance, if you need 1 pound of fertilizer to cover 500 square feet, you can put 1 pound of fertilizer in a gallon of water and water the 500 square feet until the solution is used up. It's important that you apply the recommended rate per the area to be covered. **Continue reading on back**

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