



APPLYING DB-110 TO A POND

When applying DB-110 Pond Sealer and Water Clarifier to a pond (or lake) it is extremely important to remember that it must be diluted down to 1000 parts of water to 1 part of DB-110 product. That means a 5 gallon jug of DB-110 needs 5000 gallons of water to mix/apply. (UN-chlorinated water.)

There are two reasons for this: a) it renders a more even and effective dispersion of product in the pond (it just works better), and b) this dilution rate virtually eliminates any risk of the product being thick enough in the water to coat the gills of fish living in the pond. DB-110 by itself will not harm animals, fish or plants, however... because it is so strong it can, if not mixed correctly with water, coat the gills of fish and suffocate them before it completely disperses in the water and off the fish gills. (Too much peanut butter in your mouth at one time can choke you !)

First, let us address a couple of the INCORRECT methods of applying DB-110 that we've heard about. At Pond Doctors we hope you will not be tempted to mix DB-110 in a bucket or barrel and then pour it into a pond. Number one, it will take forever. For example: If you are using a 55-gallon drum full of water, you would only need 7 ounces of DB-110 in each filling/mixing. That means it would take ninety-one 55-gallon drums of water to mix in just 5 gallons of DB-110.

Incredibly... we've even heard of a pond owner pouring undiluted DB-110 directly into a pond. We cannot dis-advise this strongly enough! Your risk of killing fish is high and you will not see even dispersion into the bed or bottom of the pond.

THE CORRECT WAY – To correctly apply DB-110 to a pond, we advise the use of a powerful water pump, commonly called a “trash pump” or “irrigation pump”. This type of pump has an impeller chamber that drives the water through the pump. This impeller is extremely effective as a mixer for combining the DB-110 efficiently with the water. (See diagram on reverse side.)

For this method the pump assembly needs a small modification. There must be an “eductor valve” installed on the water intake hose. We use a 1/2” ball-valve and a six foot length of heavy wall/clear or reinforced/clear 3/8” tubing. Here are the steps we take and recommend when applying DB-110:

1. We recommend wearing a pair of rubber boots for this process.
2. The typical pump must be primed with pond water through the top of the impeller chamber.
3. Place the intake hose filter and hose into the pond edge water as free of scum and debris as possible.
4. Open the container of DB-110 and place the eductor hose all the way to the bottom of the container. Avoid allowing the eductor hose to come back out of the container until emptying that container or the completion of the application. DB-110 is VERY slick and difficult to wash off with just water.* (See below.) Have wipers on hand to use, especially if applying more than one container.
5. Make sure the eductor valve is CLOSED !
6. Start the pump and allow to idle until the output hose or nozzle begins outputting water. Direct this idled flow into the pond. (Running without water in the impeller chamber can damage the pump.)
7. Secure the nozzle and bring the pump up to full RPM's (full throttle for a gas-powered unit.)
8. Slowly open the eductor valve and observe the milky DB-110 moving from the container toward the eductor valve and the water intake hose. When it reaches the intake hose the DB-110 will begin to mix with the water. It is critical at this point to watch the water (now mixed with DB-110) as it enters the pond. Spray it closely enough to the pond edge at first, about 4 or 5 feet out, so you can observe the mixture. (Don't punch holes in the pond clay liner with the water flow.) If the mixture is too strong (not diluted enough) it will appear stringy or “gloppy”. If it is mixed correctly the output mixture of water and DB-110 will appear smooth, as though you were pouring diluted cows-milk into the pond (like skim-milk).

Note: It takes us about an hour to input a 5-gallon jug (cube) of DB-110.

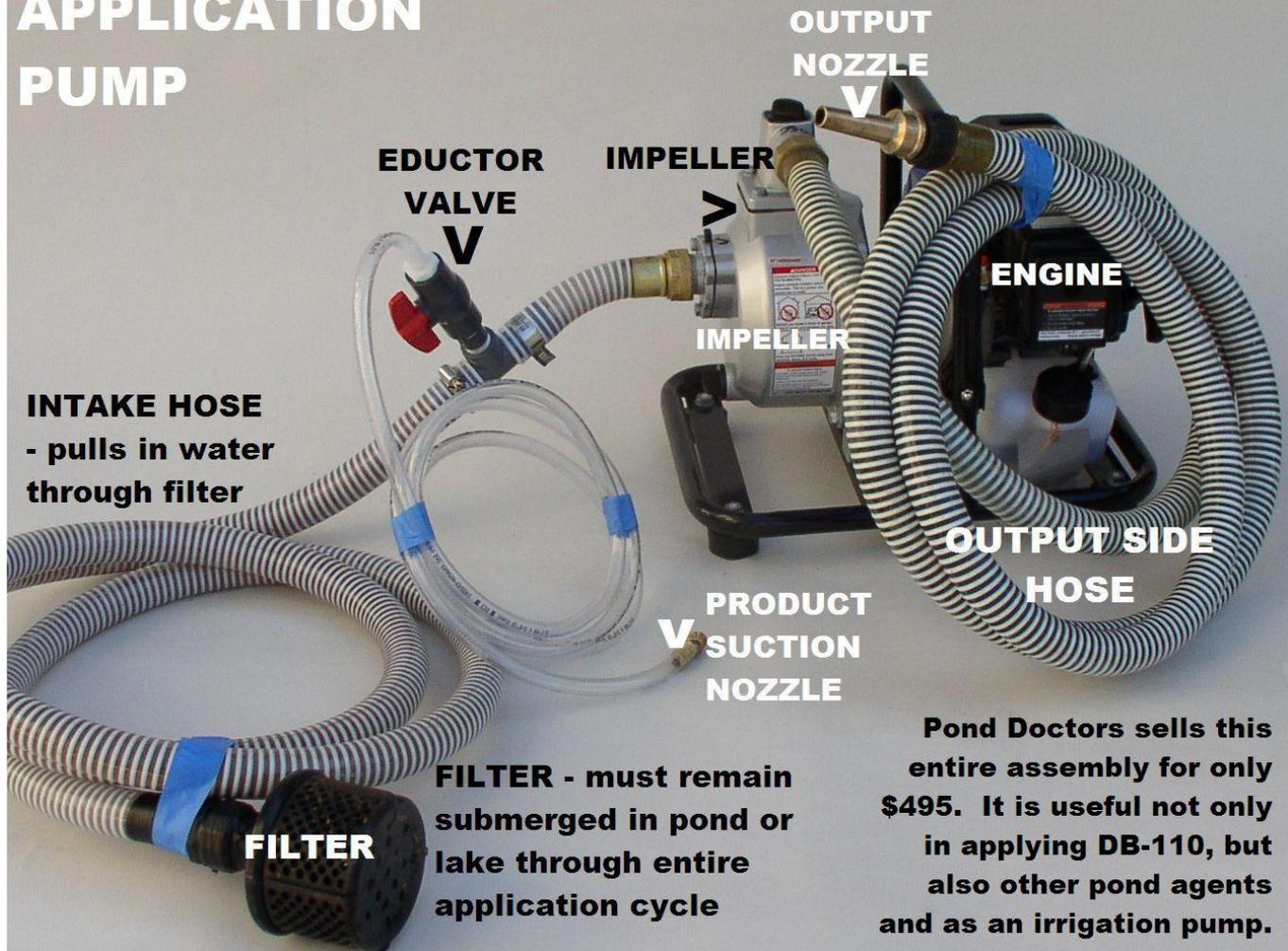
When spraying banks, up to the point where you would like the water to rise, direct the spray up so that it rains down on those areas. Don't spray directly down at the banked dirt as the force could create holes.

When all the DB-110 is applied to the pond, turn off the pump and open the eductor valve all the way. Next remove any nozzle from the output hose and place the loose end of the eductor hose well up into the output hose and hold it tightly there. Keep the intake hose and filter in the pond. Re-start the pump and allow the output hose water (under lots of pressure) to circulate back through the eductor hose so that clear water can eventually wash out ALL residue of DB-110 from the eductor hose, the ball valve, the impeller chamber and output hose. (Holding the end of the output hose/inserted eductor hose with one hand UNDER WATER helps eliminate spraying yourself with the bypassed flow.) When the eductor hose shows “clear” of DB-110, the entire assembly should be clear of product... shut off the motor.

Last (with the motor OFF)... open the bottom port on the impeller chamber and drain any water from the chamber. This will prevent any small amount of DB-110 that might remain in the impeller from swelling up hundreds of times its original size and making future use or cleaning of the pump difficult. **IMPORTANT:** Failure to clear the DB-110 from the entire pump assembly can make the assembly difficult to start or use again.

It typically takes 3 to 5 days for applied DB-110 to settle completely into the pond bottom. Do NOT apply when it is likely that the pond will soon overflow.

PRODUCT APPLICATION PUMP



INTAKE HOSE
- pulls in water through filter

EDUCTOR VALVE

IMPELLER

IMPELLER CHAMBER

OUTPUT NOZZLE

ENGINE

OUTPUT SIDE HOSE

PRODUCT SUCTION NOZZLE

FILTER

FILTER - must remain submerged in pond or lake through entire application cycle

Pond Doctors sells this entire assembly for only \$495. It is useful not only in applying DB-110, but also other pond agents and as an irrigation pump.

*Clean off DB-110 by washing in large amounts of water or by diluting standard bleach or pool chlorine and washing with that solution. Anything with chlorine cuts it very well.

Remember, DB-110 is not intended nor is it approved for use in flowing bodies of water, such as creeks or rivers.