

Important Information—Please Read Before Treating Your Pond

Water Changes When To Make Them?

After Winter

In the Spring it is always wise to do a gradual partial water change of 20-40%, this is because during the winter months with cold weather a lot of the ponds natural bacteria will die, also as the water cools their rate of reproduction also slows. Therefore the water will have a heavier carbon loading than normal which is not good for aquatic life.



Before Using a Pond Treatment

If you have used a different pond treatment in the last 6 months it is always wise to do a partial water change (10-20%) before using a new treatment. This is because different manufactures treatments have:

- 1) Different chemical formulas and they may not be compatible with the product you are about to use.
- 2) Some products, even so called natural biological products contain metals such as zinc, copper, aluminium etc. These metals will build-up over a period of time in your pond. They do not evaporate so you can only remove them via water changes.

Doing the Water Change

Remember, do not change more than 20% every other day, this is to give fish time to acclimatise to the different water conditions.

IMPORTANT INFORMATION - Oxygen Requirements For Fish

Assess your pond before using any water treatment - check levels of oxygen, ammonia, nitrite, nitrate, pH, general hardness etc. Many fish fatalities are due to lack of oxygen in the water, for example koi need 6 ppm dissolved oxygen at rest and higher levels when active, most ponds require 8-10 ppm dissolved oxygen. In all ponds, the biological filter and plants demand dissolved oxygen first and the fish survive on the residue, in most ponds supplementary aeration is vital to fish welfare.

Any water treatment can lower dissolved oxygen levels and water conditions may decrease it still further.

WARM WEATHER CAUTION - The higher the water temperature is the lower the level of dissolved oxygen present therefore in warm summer months adequate aeration is essential. The factors below all affect pond water oxygen levels. Do not shut pond pumps and aeration devices off at night.

- Oxygen levels, derived from photosynthesis rise during the day when sunlight shines on plants and green algae in the water.
- Oxygen levels, drop at night because pond oxygenating plants and algae are not producing oxygen but consuming it as well as the fish and bacteria, therefore do not use pond treatments in the evening or early morning.
- Muggy, overcast summer days often precipitate oxygen depletions. During cloudy weather, the intensity of light reaching surface waters is greatly diminished, resulting in a marked decrease in oxygen production from photosynthesis. Oxygen consumption, however, remains unchanged. This results in a net loss of oxygen over each 24-hour period.
- The recent use of another pond product increases the risk of an oxygen deficit especially medical treatments and water de-chlorinators.
- Fish species vary with the volume of dissolved oxygen they need for survival and fish such as large Koi have a much greater requirement. The larger the fish the more oxygen it needs.
- A waterfall or fountain moves the water but fails to produce the minute air bubbles that provide oxygen. An air pump (sized for your water volume) which adds oxygen via air stones / diffusers is recommended for all ponds.
- Test kits are available from aquatic outlets to test water parameters.
- If despite precautions, fish rise to the surface and gasp—use a hosepipe to introduce oxygenated water temporarily while an air pump is immediately installed.

Which Order to Use Hydra Products?

When treating your pond with multiple Hydra Aquatic products do not mix products but use the products in the following order:

- 1) Quartz. 2) Crystal. 3) Water Dyes. 4) Bio Aquatic Bacteria Boost. 5). Phos-Gone. 6). Silt-Less.

As with all pond treatments only use when you can observe fish - in the unlikely event of an adverse reaction.

Always leave at least 5 days between adding different treatments to ensure the previous treatment has been completely exhausted. If using the Quartz and Crystal in the same pond do a 10-20% water change after using the Hydra Quartz. No need to do a water change when adding other products listed above.

In lakes because the volume buffering capacity is much greater there is no need to do water changes.

Hydra Bio Aquatic Bacteria Boost - Blue Measuring Spoon - 1 level spoon = 1 oz, 1 heaped spoon = 1½ oz

Boosts the ponds natural bacteria levels this accelerates breakdown of organic material and out-competes algae for nutrients required for their growth. If using other treatment wait for 48 hours before using **Hydra Bio Aquatic Bacteria Boost**.

During treatment

All bacteria consume oxygen and they will reduce the amount available for fish, therefore ensure adequate aeration by water pump or air pump. Allow plenty of time to observe fish in the unlikely advent of an adverse reaction. Leave UV lights switched off for first 24 hours to give bacteria a chance to be established.

Application Method

Either add directly to biological filter or mix with 1:20 with water from pond or lake in plastic bucket, leave to activate for 20 minutes then pour the solution around the surface of the water. Diluted form is to be used within 30 minutes of mixing. If possible circulate treated water by pump for even distribution. See label for dilution rates.

Hydra Crystal - Blue Measuring Spoon

Initial Dosage - 1 heaped spoon treats 100 gallons

Maintenance Dosage - 1 heaped spoon treats 400 gallon

Activated by water the product immediately starts to electrically charge individual algae cells so that they clump together. They either sink to the bottom of the pond where the filter system will clear them or float to the top. If there isn't a filter system - particles will simply settle and decompose over time. Best time to apply is late morning to early afternoon.

Do Glass Test Before Applying To Pond

Take a sample of water from your pond into a clear glass. Add a pinch of **Hydra Crystal** (as in pinch of salt) to glass and stir with spoon. The water will initially go cloudy then you will start to see clumps forming as it pulls the green algae out of the water (within 30 minutes). Leave overnight and depending on product used you should be left either with a fine sediment at the bottom of the glass or algae floating on the surface with the remainder of the water crystal clear.

N.B. If for any reason the above does not happen, please speak to our Technical Helpline on 1-866-809-7286 before using the product

During treatment

Ensure adequate aeration by water pump and or air pump. Remember algae is adding oxygen to your water, therefore removing it will lower your oxygen levels. Allow plenty of time to observe fish - in the unlikely advent of an adverse reaction. Clean mechanical filters before starting treatment and keep these filters clean during treatment. Either dose Hydra Product at pump outlet, broadcast over pond surface, or dilute with tap water and add as a slurry. If powder floats on surface use hose with spray jet to mix into water body.

Circulate treated water thoroughly for even mixing and distribution. Leave UV and pump switched on.

If you find that the algae floats on top of the water (as a scum) during treatment it is important that this is removed from the pond, using old tights, sheet or towel to line a net. Bring this underneath the algae and net algae out. If this is not removed it could interfere with the normal air / water exchange of oxygen.

In extreme cases if no improvement is seen - repeat application (after 48 hrs). Before retreating always take a sample of your pond water into a clear glass to check that it is in fact green and not simply suffering from suspended solids.

Hydra Quartz - Blue Measuring Spoon - 1 level spoon = 30g, 1 heaped spoon = 45g

Initial Dosage - 1 heaped spoon treats 100 gallons

Maintenance Dosage - 1 heaped spoon treats 500 gallon

Hydra Quartz are easy to use granules which start working on contact, they starve the blanket weed by chelating and absorbing nitrates and phosphates which are essential for blanket weed growth.

During treatment

Ensure adequate aeration by water pump or air pump. Remember algae is adding oxygen to your water, therefore removing it will lower your oxygen levels. Allow plenty of time to observe fish - in the unlikely advent of an adverse reaction. Clean mechanical filters before starting treatment and keep these filters clean during treatment. Easy to use simply sprinkle or broadcast onto affected areas. Switch off pumps for 30-60mins whilst ensuring water is oxygenated. UV lights can be left on during treatment.

In extreme cases if no improvement is seen - repeat application (after 48 hrs).

When To Use at Maintenance Dosage

Use every 1-2 month at maintenance rate to keep pond clear of blanket weed.

N.B. Do not use if the pond is clear of blanket weed (wait until it starts to appear). If you have to repeat any **Hydra Quartz** treatment leave at least 48 hours between consecutive treatments and change 10% of pond volume before subsequent treatment.



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