

HYDRA pH Up



Rapidly Releases pH Buffering Solution



HYDRA[®]

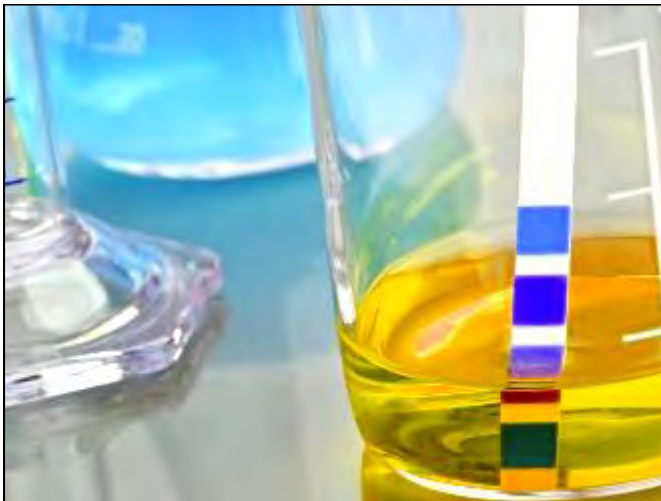
Features & Advantages

Releases pH buffering solution to keep pond and lake water in balance.

- ◆ Hydra pH Up rapidly releases a pH buffering solution into the pond water to help keep it in balance for GH General Hardness and KH Carbonate Hardness.
- ◆ Pond alkalinity is naturally decreased over time through bacterial action which produces acidic compounds that combine with and reduce the alkalinity components.
- ◆ Rain in today's global warming climatic conditions contains large amounts of CO² which is acidic.

- ◆ Ideal for emergency treatment in case of pH crash which can cause death of fish.
- ◆ Ponds with vinyl liners or of fibre glass construction tend to show a decrease in alkalinity (they do not contain any natural pH buffers) over time and need Hydra pH Buffer to maintain an acceptable level.
- ◆ Immediately rectifies emergency pH crashes that can cause fish death.
- ◆ Does no harm to pond plants.
- ◆ Safe for aquatic life, including delicate fish.
- ◆ Free from algae-growth promoting phosphates.

Description



One product that immediately and easily rectifies the problem of low pH is Hydra pH Up.

This pond product especially addresses low pond pH levels by bringing pond pH up instantly but within a tolerable and safe level.

It works fast by releasing its buffering solutions to the water, soaking up excess free hydrogen ions to raise pond pH up gradually and stop the many problems caused by low pH.

Ideal pH for Fish

Different types of fish have their own range of favoured pH.

For example, koi's preference leans towards a more alkaline range between 7 to 8.5 pH, while other fish prefer a less alkaline range of 7-7.5. pH readings outside their comfort zones cause fish stress and pose a threat to their health .

The Blessing of a Hard Water Supply

The addition of even small amounts of alkaline or acidic substances can cause drastic pH swings in pure water.

If these wild pH swings happen in ponds, the effects it would bring to fish and aquatic life can be disastrous.

Fortunately, if your water supply is hard, ponds are protected from these dramatic pH swings by substances in the water that cause water hardness. These substances act like buffers and prevent sudden and potentially fatal fluctuations in pH levels.



As a rule of thumb, hard water, which is slightly alkaline, give the benefit of having a better buffering effect than soft water that is slightly acidic.

Description

What Your pH Reading Actually Tells You

Your pH reading tells you the acidity or alkalinity of your pond water to give you an idea of your water quality and chemistry that strongly affects your pond's filtering ability and fish health.

pH is measured on a scale of 0 -14, where 0 is extremely acidic, 14 is extremely alkaline and 7 is neutral.

Water becomes acidic when there is a presence of more free hydrogen ions or H^+ in the water and alkaline when there are more free hydroxyl ions or OH^- present.

So if you get a neutral pH reading of 7 that means that there's a complete balance of H^+ ions and OH^- ions in the water.

What should be pointed out with this scale is that the difference of 1 pH unit is not really as small as it seems.

Even a seemingly slight change in reading actually signifies a big difference in acidity or alkalinity.

That's because the pH scale is a logarithmic measure of ion concentrations, so each whole number difference in pH reading represents a ten-fold change.

For example, a pH 4 reading is ten times more acidic than a pH 5 and is 100 times more acidic than a pH 6.

Really pure water has a pH of 7. Maintaining 100% pure water is virtually not achievable. However, this doesn't mean that a balance can't be achieved.



A pH 7 can be attained if the substances dissolved in the water create a balance of hydrogen and hydroxyl ions.

What Affects Your Water's Buffering Ability

Even if your water is hard and well-buffered, there is another factor that can affect pH.

When bacteria in your filter go through the process of converting ammonia to less toxic substances known as nitrification, this slightly acidifies water.

It also gradually diminishes the capacity of hard water to buffer or protect it from wild pH swings.

How To Use

Simply mix the recommended dose with pond water in a plastic bucket then pour evenly around the perimeter of the pond .

Usage Rates:

- 1 gm treats 7 litres (1.54 gallons).
- 1 kilo treats 7,000 litres (1,540 gallons).
- 5 kilo treats 35,000 litres (7,690 gallons).

Full usage instructions on label.



Laboratory Facilities

Hydra International Ltd.'s Research & Development Laboratories are a hub of activity where new products are developed and formulated. We have working relationships with our raw material suppliers, many of these suppliers are major world-wide chemical manufacturers with their own development laboratories.

As a company we are well known in the chemical industry for being receptive to cutting edge new chemicals which can be incorporated into our products to achieve performance advantages. An important part of the International Standards that we hold is that of constant improvement. We show that we have achieved this at every independent audit.



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