



Aqua-Dye *Liquid blue aquatic colourant*

Active ingredients: *Sulphonated acid dye, disodium salt*

Pack size: *5L, 20L*

Aqua-Dye a better way to manage water bodies.

Lake colourants have a proven role in the management of water bodies and choosing a good one can lower input costs and improve appearance dramatically.

Aqua-Dye is a most efficient and effective way of suppressing the growth of algae in lakes and preventing the development of aquatic weeds that grow deeper in the water body.

The benefits of using **Aqua-Dye** soon become apparent to users as it provides a pleasant, natural looking colour to the water body in an easy to use formulation at a competitive price.

- Highly concentrated formula – 1L of **Aqua-Dye** treats 5 megalitres of water
- Highly cost effective compared to powdered competitors
- **Aqua-Dye** acts as a sunscreen for the water which inhibits penetration of UVA and UVB light, slowing down algal production and submerged aquatic weed growth.
- It is non – toxic and long lasting
- Ideal for aquaculture ponds or ornamental/ decorative ponds

- Reduced light penetration cuts down reflection and reduces stock predation
- Bulk quantities available

Aqua-Dye is used as a tool in the management of our aquatic resources by cutting down photosynthesis in the algae and emergent weeds present. This is effectively slowing down the nutrient cycle, which leads to high nutrient levels causing excessive phytoplankton growth.

Any water body suffers to a certain degree from “eutrophication” or nutrient build up. The degree to which a pond or lake suffers is dependent upon a factors such as inflow, outflow, depth, water quality coming in whether effluent or primary treated water, shape of pond, water mixing and movement or lack thereof.

Nuturf can offer solutions to all the problems associated with nutrient build up, the worst of which in most cases is excessive weed and algal growth which makes the water body unsightly, emit foul odours, reduce usable volume, causes irrigation and pumping issues, fish kills and blue green algae blooms.



To completely fix a water body we must break the nutrient cycle. In very basic terms algae and water weeds grow, feeding upon the nutrients available in the water column until such a time as there is not enough nutrient to sustain the population (in which case it dies off), or the algal bloom becomes so dense that it causes an oxygen crash, killing any oxygen dependent organisms within the water body. The dead algal bloom and any other dead organisms settle on the bottom of the water column and become a nutrient rich



sludge which becomes what is effectively a fertilizer for the next algal bloom and water weed population growth, and so on the cycle continues. Left unchecked, this cycle will lead to the water body becoming more and more shallow and choked until eventually it will no longer exist as a water body, but as a swamp/wetland.

WATER QUALITY AND THE IRRIGATION PROCESS.

Poor water quality negatively impacts upon the irrigation process in a number of ways. Fluctuating pH values brought about by the conditions described above can cause corrosion to the irrigation system when low or “acidic”, and scaling or build up (precipitation) where high or “alkaline”.

There are also reticulation issues caused by excessive algae and weed infestations due to the infiltration of organic matter through foot valves, filters, pumps, solenoids and irrigator heads.

The most prevalent issues we see resulting from poor water quality in turf irrigation water are due to high pH values in the range from around 8.5 to above 10 (very alkaline). There is a direct correlation between high pH values and levels of carbonates, bicarbonates, and sodium present in the water.

These levels have very negative effects upon soil chemistry and structure, permeability, leaching and the availability of essential nutrients such as calcium and magnesium which become bound up as salts.



By restoring lake and pond health through the nutrient management process we can regain control of the critical water quality indicators and limit the effects of the issues that arise from these fluctuations.

Key improvements include –

- Maintenance and labour costs related to irrigation infrastructure and its upkeep by reducing corrosion caused by acidification and calcification/build up as a result of high alkalinity, and infiltration of organic matter throughout the system causing blockages and fouling.
- Reduction in soil acidification where water is acidic.
- Reduce levels of carbonates and bicarbonates and sodium in alkaline water therefore making key nutrients and minerals more available to the turf.
- Increase the effectiveness of many of the herbicides and pesticides and other turf products used day to day, by keeping water quality parameters within optimal range for actives to operate.



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