



Improving the Clarity of Lakes and Ponds



SOLUTEK



Clean Water Gives Life

Background



SolEco Limited has developed ground-breaking water treatment products with the potential to achieve significant water quality improvements.

They are natural bio-organic products that contain no “live” organisms; are completely safe to use and are not classified as Hazardous Chemicals.

* Solutek, SolEco’s flagship product, is well proven and has been in use in Australasia for over 20 years.

It is:

- ⇒ 100% bio-degradable,
- ⇒ user and environmentally safe,
- ⇒ non-hazardous,
- ⇒ non-flammable and non-corrosive.

Key Benefits of Solutek

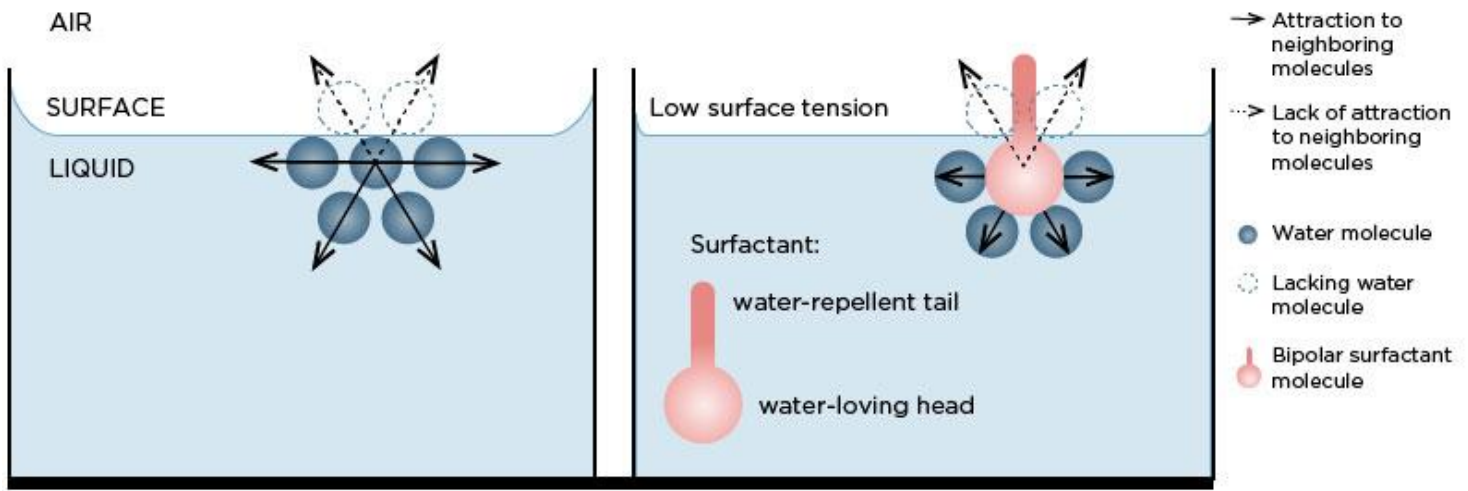
- ⇒ Substantial reduction in BOD (Biological Oxygen Demand) and COD (Chemical Oxygen Demand)
- ⇒ Substantial reduction in TSS (Total Suspended Solids)
- ⇒ Substantial reduction in Oil & Grease in the water column
- ⇒ Reduction (or elimination) of hydrogen sulphide (odour)
- ⇒ Lower corrosion and maintenance costs

*** Solutek is a proven and preferred treatment used by many water authorities around the world.**

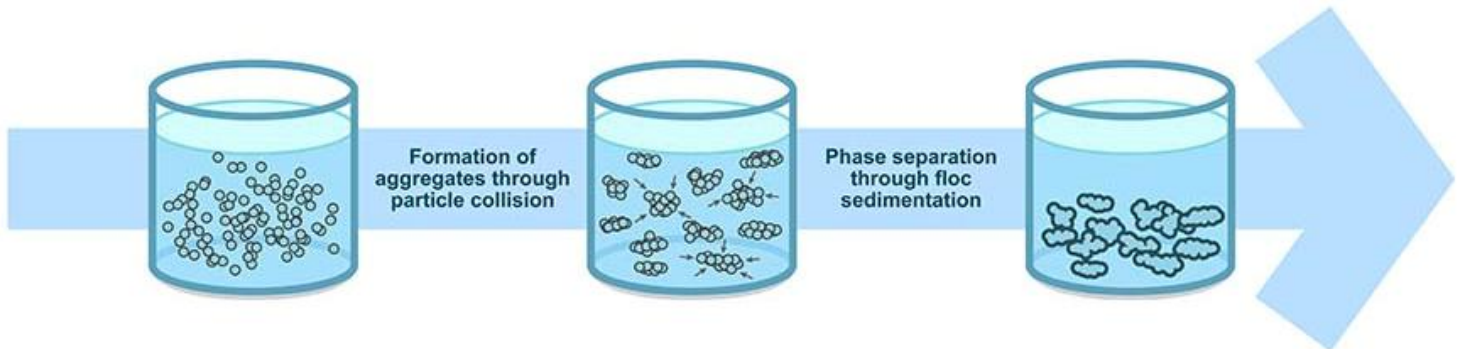
The economic and environmental advantages of Solutek, when compared to chemical treatments, Oxygen injection and bacterial additives is undeniable.

Improve Water Clarity

1. Solutek's water remediation qualities and abilities include the substantial reduction of any and all carbonaceous matter by enhanced biological means.
2. When dissolved in the lake or pond water, Solutek also acts as both a SURFACTANT and a FLOCCULANT:
 - ⇒ As a SURFACTANT it reduces the surface tension of the water being treated



⇒ As a FLOCCULANT it promotes the clumping of particles in the water column



The result of these combined activities is to encourage surface and suspended particles to aggregate together and sink to the bottom.

This allows UV and SUNLIGHT to penetrate deeper into the pond or lake water, inhibiting the growth of microorganisms that would otherwise reduce water clarity.

Improve Water Clarity

1. Solutek also has a positive impact by reducing the levels of Nitrogen (N) and Phosphorous (P) in the water column, thereby reducing the nutrients available to various groups of microorganisms and limiting their growth and reproductive rates.
2. Over time, Solutek will consume the inevitable layers of sludge that will have accumulated on the pond or lake bottom.
3. The resulting improved conditions will enable any aquatic life in the water to thrive.

Dosing

WHERE

If the body of water is fed by a water source, such as a spring or stream, then choose that point to add Solutek.

Otherwise, for small bodies of water (up to 10 million litres) a small fountain may be needed to ensure the Solutek solution will be adequately dispersed.

For larger bodies of water a circulation study should be performed to see where Solutek can be added to ensure adequate dispersal. If there is limited circulation, small fountains should be added with pumps forcing the water into the air for a few metres to allow for some aeration and mixing of the water and Solutek solution.

HOW MUCH

Unless the standing water is extremely polluted, an initial dose of 10 ppm should be added weekly for two to three weeks.

Then the dose can be reduced to 10 ppm every two weeks.

After the improvement stabilises, the dose can be reduced to 8 ppm and ultimately to 6 ppm



Case Studies

Maguireville Garage

18110 Knollwood Blvd

Monument, CO 80132

12 November 2016

To Whom It May Concern

Maguireville Lake

The lake is approximately 1.5 acres on the surface, 12 feet deep, and is estimated to be about 8 acre feet of water. The lake was created around 1958 by excavating out the lake from the Dirty Woman Creek. It flows all year round and its current flow is about 9 CFM -- in the springtime the flow is much higher.

Before dosing with Solutek the lake was cloudy and you could not see the bottom of the lake. The color of the water was very green.

The lake was dosed twice with 20 liters of Solutek, putting small amounts around the edge and half the container at the entrance to the lake from Dirty Woman creek. We used a pump with a 2-inch pipe to create movement/cavitation in the lake and let the pump run 8hrs per day for three days. We pumped the water from the east side of the lake and put it back into the lake on the west side. The second dose was put in the lake 7 days after the first.

I could see an improvement in the lake after three days and am very happy with the difference.

After two weeks you could see further into the water and the nature and health of the lake was noticeably better.

After three weeks there was still more improvement.

Today, 4 weeks after the first dosing, you can see deeper into the lake and fish are visible. The lake is too deep to see the bottom, but I am very happy and will use Solutek again in the spring.

If you want an organic solution to your water issues, I recommend and endorse Solutek.



Jim Maguire
Owner

Case Studies

Pine Run Ranch

13354 Meridian Rd

Elbert, CO 80106

12 November 2016

TO WHOM IT MAY CONCERN

I have a small lake - about 3 acre feet - on the Pine Run Ranch outside Colorado Springs. I had a problem with the quality of the water in the lake. It was cloudy, murky and had a distinct green color.

The lake was created about sixty years ago by damming up the seasonal creek called Pine Run. The water is used for ranch animals and has held water since its creation.

About four weeks ago I added 20 liters of the organic solution "Solutek" to the lake and the results are amazing! The water is much clearer and healthier than I have ever seen it. I now can see the bottom of the lake and I will soon be stocking the lake with fish!

I am very happy with Solutek and can recommend Solutek to anyone who wants a natural solution to dirty water.



Patrick Quinlan

Owner, Pine Run Ranch

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Case Studies

Still Water Clarification

Shibuya Ward
Tokyo, Japan

Background

SolEco was invited to undertake remediate action on a Council owned pond in Shibuya Ward of Tokyo, Japan.

The pond of approximately 1 million litres is fed by a basin that has run off from concreted areas and has a high level of phosphate due to dog faeces. The pond has high aesthetic value and is the home to numerous fish and turtles.

Unfortunately, due to the poor quality water inflows, the pond had high levels of Chemical Oxygen Demand (COD). The typical COD before the SolEco Organic Concentrate treatment was 20 to 25 COD.

Due to the low amount of Dissolved Oxygen in the water, turtles and fish could be seen coming to the water surface regularly to get oxygen from the atmosphere.

SolEco worked closely with the Shibuya Council to dose the pond with 250 litres of SolEco Organic Concentrate. The dosing was delivered by the use of a spray across the surface of the water.

Results

Two days after the dosing of the pond the COD levels were tested again.

The COD levels were 7-8 COD.

In other words the SolEco Organic Concentrate achieved a 65 to 70% reduction in COD (or a 65 to 70% increase in Dissolved Oxygen) in the pond.





Odour control
Water clarity improvement
Biosolids / sludge reduction
Improved environment for aquatic life
Improved quality of enjoyment for
recreational activities

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