



## Nano Stick for Pools and Spas

The patented NanoTitanium Technology reduces organics to carbon dioxide and water when exposed to light. The patented photocatalytic ceramic material is packaged in an easy-to-use stick; one 32" stick treats 10,000 gallons for up to four months and leaves no byproducts. 10" Nano Spa stick is also available for smaller water systems.



A Revolution in Water Purity.

- Safe, Non-Chemical Water Clarifier
- Uses light to reduce organics
- No by-products left in the water
- Compatible with all sanitizers
- No effect on pH
- Lasts 4 - 6 Months
- No installation

This is how NanoTitanium™ reflectors look under the microscope.





## Why NanoTITANIUM Technology

### NanoTITANIUM Technology:

Gives Selecto Scientific, Inc. the ability to use a patented protected combination of photo catalytic ceramic properties along with strong oxidizing agents to prevent and destroy contaminants. No chemicals are introduced into the water.

### What NanoTITANIUM Technology is used in:

Water Treatment, especially wastewater treatment, coatings, paints-mildew inhibitor, brighteners.

### How NanoTITANIUM Technology works:

By Contact! When a contaminant contacts the media inside the NanoSTICK®, photo catalyst generates a strong radical\* (stronger than hypochlorous acid or even ozone). A proprietary patented oxidation agent enhances this function. This happens in a NANO second leaving nothing behind.

### \*Radical

Often called a free radical: An atom or group of atoms with at least one unpaired electron. In the body, it is usually an oxygen molecule that has lost an electron and will stabilize itself by stealing an electron from a nearby molecule. "In the body free radicals are high-energy particles that ricochet wildly and damage cells".

### How is NanoTITANIUM used in the NanoSTICK®:

It is embedded as part of the ceramic material and will not erode into the water.

### Why do we get greater results than a mineral system:

Minerals go into the water to surround and kill, leaving dead matter behind to be filtered or oxidized out. Silver's life expectancy in the water is very questionable and is a very slow disinfectant at best. Silver is destroyed by the chloride ion, which is a by-product of chlorine sanitation. By contrast NanoSTICK® works on contact putting nothing into the water. The hydroxide radical completely oxidizes contaminants to carbon dioxide and water in a Nano second.

### Does pH of water affect performance:

The NanoSTICK® is not dependent on pH nor does it affect pH.

### Does temperature affect performance:

The NanoSTICK® is effective from 34 degrees to 160 degrees F. It increases in effectiveness as temperature rises.

### How does the highly charged media impact microbial growth:

It will destroy the microorganism's RNA and DNA (or cell) structures.

### What about polyphosphates:

Polyphosphates will be destroyed when they are free in the water.

### What about copper that is attracted to the media inside the NanoSTICK®:

It is still effective as an algacide.

### Why does water look clearer after NanoSTICK® has been in it for a few days:

Pure water has a much higher degree of refraction (exposed to sun light it looks like diamonds) than does water with impurities. You could say it is "perkier".

### Why does water feel differently after NanoSTICK® has been in it for a few days:

Pure water has a more comfortable feel to the skin. Softer silkier.



**Why does sanitizer consumption go down:**

The NanoSTICK® is destroying organics that would consume the sanitizer.

**Why is it easier to control pH:**

Most sanitizers affect pH. By virtue of having to consume less sanitizer, there is less affect on pH.

**Why is it easier to keep water balanced:**

The NanoSTICK® introduces nothing into the water and enables the pool to operate with fewer chemical applications

**Can the NanoSTICK® stain my pool:**

There is nothing applied to the water to affect the pool shell.

**Will the NanoSTICK® reduce formation of oil and scale (bathtub ring) at my water line:**

The oxidizing process will rid the pool of oils and enable the water to hold more calcium in solution therefore reducing the likelihood of "bathtub ring".

**How long will the NanoSTICK® last:**

The NanoSTICK® will last 4-6 months, depending on the organics it has to get rid of.