

# Sell NC Brands™ Products with Confidence

Natural Chemistry® and SeaKlear® water treatment products work hard to improve the swimming experience

### SMARTZyme® Technology Provides:

- Perpetual enzymatic cleaning action that increases filter run cycles, in turn reducing frequency of filter cleanings. This same cleaning action also helps to reduce the buildup of unsightly scum lines.
- Cost savings - the perpetual cleaning of enzyme products helps customers save money on water and chemicals previously lost through constant backwashing and spa draining.
- Superior water quality with less work.

### Phosphate Removal Technology:

- Cutting edge phosphate removal products that have a positive impact on pool maintenance needs.
- Includes easy to use, customized formulas based on product application needs along with convenient test kits.

### Clarification Technology:

- **SeaKlear** pioneered the use of chitosan clarification in the swimming pool and spa industry over 30 years ago.
- **Chitosan Clarifier™** is unique in that it can be used at the same time as shocking a pool or spa. It works well with high levels of sanitizer to quickly clear cloudy water. **Chitosan Clarifier** also improves filtration, allowing for peak water clarity to be obtained. Trust the original chitosan clarifier with your water clarification needs.
- **Natural Chemistry** pioneered the use of a 6-in-1 blended polymer to achieve the ultimate in water clarification.
- Ideal for use in swimming pool water with difficult to remove particulate.

### Metal Control & Plaster Start-Ups:

- Choosing the right stain and scale control is crucial to keeping your pool finish pristine and water sparkling clear.
- **Natural Chemistry** and **SeaKlear** offer a wide variety of specialty technologies that range from existing metal stain treatment to new plaster protection, or controlling calcium scale buildup on equipment.
- Whether you need proactive stain and scale control or help solving a problem, **Natural Chemistry** and **SeaKlear** products have got you covered.

Offering these brands differentiates you, the Pool Professional, from mass merchants. This means you will have happy, repeat customers looking for trade quality products.

## Enzymes and Non-Living Organic Contaminants

### Naturally Based Enzymes



NC Brands broad spectrum enzyme formulas will remove most varieties of non-living organics from pool and spa water

# VS

### Man Made Enzymes



Typical man made or manufactured enzymes remove only fats and oils

Various sources of non-living organics includes: soaps, sweat, lotions, cosmetics, deodorant, jet fuel, airborne pollution, anti-freeze residue, vegetation, hair products, shampoo, pollen, body oils and more.

Since non-living organics come from a broad range of sources, you want enzymes that offer a broad range of solutions.

Otherwise, you will be leaving contaminants behind to cause future problems in pool or spa water.

**NC Brands™ has you covered!**

# Why Naturally Based Enzymes? SMARTZyme® Technology!

Our enzymes are created through the fermentation of a broad spectrum of annually renewable sources such as malt, botanicals and molasses. Each product is formulated to break down specific unwanted non-living organic materials molecule by molecule, until they are reduced to their elemental building blocks - such as carbon dioxide and water.

## NC Brands™ Enzymes are:

- Highly effective
- Non-corrosive
- Easy to use
- Capable of thousands of reactions

## “Naturally Based” vs. “Man-Made” Enzymes

Both naturally based and man-made enzymes come from the natural world. There are, however, major differences between them. **NC Brands** enzymes are formed by fermentation. They are made up of a complex set of ingredients that yield many types of enzymes and co-enzymes, the result of which is equilibrium or a balanced state.

The process of fermentation produces a broad spectrum of balanced naturally based enzymes that combat a vast variety of non-living organics. This is what makes naturally based enzymes so effective in pool and spa water. Pools and spas contain a wide assortment of non-living organic contaminants.

Comparatively, manufactured enzymes are isolated. They are made in sterile conditions with few by-products. Often unbalanced when blended, some manufactured enzymes may attack and break each other down in the bottle. This can lead to a decline in effectiveness and reliability.

Blending creates a much narrower focus with higher concentrations of a few classes of enzymes rather than the broad spectrum lower concentration produced by fermentation. At face value it may seem this could be a benefit of manufacturing, but as with many things “more is not always better.” With enzymes, a little goes a long way. Each enzyme molecule is capable of creating thousands of reactions.

Thus, a broad spectrum of coverage is much more advantageous than high concentrations of (at most) a few classes of enzymes. In addition, high concentrations of any one specific enzyme can lead to eye and skin irritation.

## Enzymes in Pools & Spas

The typical approach to pool or spa care is to use the sanitizer for everything - for both killing disease and bacteria as well as chemically burning up contaminants in the water. While sanitizers are effective at killing bacteria, they are often not very effective in the oxidation of non-living organics in pool & spa water.

Flocs and various filter aids have taken their best shot, once again with limited results. Non-living organic contaminants can be broken down efficiently with one of nature’s own biochemical wonders: the enzyme. Enzymes help reduce the non-living organic workload for the sanitizer. Sanitizers are still necessary to kill bacteria, viruses and other living organisms.

## Facts about Enzymes

- Water clarifiers are not the same as enzymes
- All enzyme products are not the same and do not achieve the same results
  - **NC Brands** enzymes do NOT contain copper
  - Enzymes work great with biguanide systems
- Enzymes should be formulated based on the specific application needs



### NC Brands = Quality Enzymes

NC Brands is a leading innovator in naturally based enzyme technology. Our enzymes reduce filter cleanings, scrubbing of scum lines, and effort needed to maintain crystal clear water. Using **SMARTZyme**® technology, **NC Brands** enzyme products work hard so you don’t have to!

## How Enzymes Work - Lock & Key Mechanism

