

# Nature<sup>2®</sup> CF

For Inground and Aboveground Pools with Cartridge Filters

### Owner's Manual

EPA Reg. No. 67712-1 EPA Est. No. 091258-MEX-001

### **IMPORTANT**

Pool Owner, save this manual! Builders, leave this manual with the pool owner!

### Safety Instructions Important Information

Please read prior to installation

Nature<sup>2</sup> CF has been designed to sanitize swimming pools from 5,000 to 25,000 gallons.



Failure to heed the following can result in permanent injury or drowning.

#### **EQUIPMENT UNDER PRESSURE**

In order to minimize risk of property damage and/or serious injury, including loss of life, always turn
pump off prior to installing or changing Nature<sup>2</sup> cartridge. Your pump/filter system is operated under
pressure and the pressure must be released before you begin work. Please see your pump/filter
owner's manual for further instructions.

### PREVENT CHILD DROWNING

Do not let anyone, especially small children, sit, step, lean or climb on any equipment installed as part
of your pool's operational system. Locate the components of your operational system at least 3 feet
from the pool so children cannot use the equipment to access the pool and be injured or drown.

#### LOW CHLORINE RECIPE

 You must strictly follow the low chlorine recipe included in this manual to maintain proper water chemistry and avoid health hazards. Failure to follow these instructions can lead to sickness from bacteria and other noxious organisms.

# **A** CAUTION

### PRECAUTIONARY STATEMENT HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### **CAUTION**

In the unlikely event that a cartridge breaks, mineral media should not be ingested by humans or animals as it may cause gastric distress.

#### **FIRST AID**

IF INGESTED: Call poison control center or doctor immediately for treatment advice.

### The Nature<sup>2</sup> Pool Sanitizer is designed only for residential swimming pools.

- \* The Nature<sup>2</sup> System consists of the Nature<sup>2</sup> technology † used in conjunction with a chlorine delivery device or 0.5 ppm of an EPA registered chlorine pool product.
- <sup>†</sup> Nature<sup>2</sup> technology consists of the minerals silver and copper.

# WE ASK YOU TO TAKE THE TIME TO GET FAMILIAR WITH THIS MANUAL.

Thank you for purchasing Nature $^{2@}$ . We believe the more you know, the more enjoyable your family's swimming experience will be – and the more you will reduce the time, effort and cost of maintaining your pool. Pool owners who switch from conventional chemical programs to the Nature<sup>2</sup> System\* spend less time maintaining their pools. Every pool has its own characteristics of water type, amount of sunlight, etc. The recipe included in this manual will help insure good water quality for your pool. Remember, your Nature<sup>2</sup> dealer can provide advice and service.

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### **DIRECTIONS FOR USE:**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

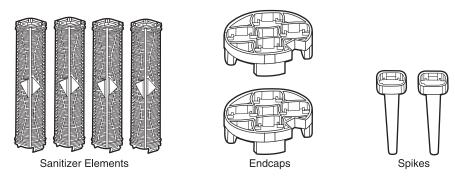
### NATURE<sup>2</sup> COMPATIBILITY

Nature<sup>2</sup> Systems\* can be used with all types of pool chemical treatments available except biguanide products and copper based algaecides.

**Important:** When converting a biguanide treated pool to the Nature low chlorine System\*, the pool must be completely drained and refilled. Then follow the Nature cartridge start-up procedure below.

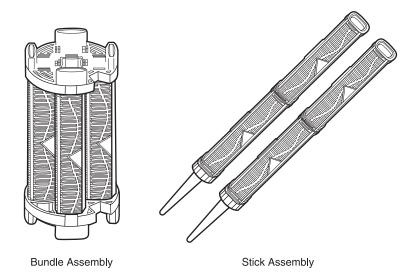
# **Assembly**

The Nature<sup>2®</sup> CF consists of four (4) sanitizer elements, two (2) end caps and two (2) end spikes.



Depending upon the size of your swimming pool cartridge filter, these parts can be assembled as a bundle of four (4) sanitizer elements, or as two (2) sticks of two (2) elements each.

NOTE: You should first attempt to use the bundle assembly.



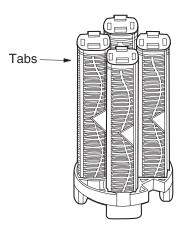
### Decide which Nature<sup>2</sup> CF assembly is right for your pool filter.

- 1. Turn off the pump and disassemble the pool filter as you normally would to clean the cartridge.
- 2. Check to see if the endcap fits easily into the core of your cartridge filter;
  - if it does, go to Bundle Assembly
  - · if it does not, go to Stick Assembly

### **Bundle Assembly**

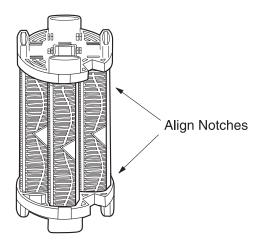
The hole in the center of the endcap accommodates a center rod should your filter have one.

1. Lay an end cap on a flat surface and snap the four (4) sanitizer elements into it, so that the tabs are pointing up.



2. Snap the other end cap on top.

**Important:** Be sure that the notch on each end cap lines up together to accommodate an air bleed tube.



### Stick Assembly

Important: Use only after attempting the Bundle Assembly.

1. Snap two (2) sanitizer elements together so that each tab and slot line up.



2. Snap the end spike to one end.

NOTE: Once assembled, do not attempt to separate the sanitizer elements as the tabs may break.



## **Start Up**

• Before starting up a new Nature<sup>2®</sup> cartridge, clean debris and algae out of the pool and pool equipment.

Important: Do not install the new cartridge until the pool water is clean and chemically balanced.

- Balance pool water before installing Nature<sup>2</sup> cartridge.
  - pH 7.4-7.8
  - Calcium hardness 200-400 ppm
  - Total alkalinity 80-150 ppm

Consult with your Nature<sup>2</sup> Dealer for specific water balance instructions.

## **Balance the Water**

To find out if your pool water is balanced:

- · take a water sample to your dealer to be tested regularly, or
- ask your dealer to recommend a pool test kit for water balance.

Element: pH	If it's too low:	The surface of your pool can become etched.
Range: 7.4-7.8		Metal parts in the pump and plumbing will corrode.
	How to fix:	Add pH increaser.
	If it's too high:	"Scale" forms on the surface of your pool.
		The water can become cloudy.
		Equipment can become damaged.
	How to fix:	Add pH decreaser.
Element: Calcium Hardness	If it's too low:	Water is less stable.
Range: 200-400 ppm		In plaster pools, the calcium is taken out of the plaster, causing the surface to deteriorate.
	How to fix:	•
	If it's too high:	Rough, discolored deposits ("scale") will form on the pool surface and inside pool equipment.
	How to fix:	Drain or dilute the pool water.
		Consult your dealer.
Element: Total Alkalinity Range: 80-150 ppm	If it's too low:	It provides no buffer so that you constantly get fluctuating pH readings, which can damage equipment and pool surfaces.
	How to fix:	Use an alkalinity increaser.
	If it's too high:	White deposits ("scale") form on the tile line.
		The plaster on pool surface becomes rough or discolored.
	How to fix:	The water becomes cloudy or milky white. Add acid to bring alkalinity down.

## Install the Cartridge

- 1. Install the cartridge into your pool filter after water is balanced.
- Superoxidize the pool water with chlorine according to manufacturer's instructions to burn off contaminants and activate cartridge.

Important: Initial superoxidation with chlorine is required to burn off contaminants and activate cartridge.

- 3. Run the circulating pump either:
  - 24 hours a day for 4 days, maintaining 1-2 ppm free chlorine throughout, or
  - 6 hours a day for 14 days, maintaining 1-2 ppm free chlorine throughout.
- 4. **Let chlorine dissipate** to 0.5 ppm once start up period is completed.
  - Do not enter the pool if the free available chlorine residual is over 3 ppm.

## Recipe

There is one (1) recipe for maintaining clean, clear, sanitized water with minimum time and effort.

This recipe provides the easiest and most economical way to care for your Nature<sup>2®</sup> pool.

### Low-Chlorine Recipe

#### Ingredients:

- Nature<sup>2</sup> cartridge
- · Chlorine granules, tablets, liquid or generator
- · pH and total alkalinity adjusting chemicals
- · Calcium hardness increaser, if needed
- Water test kit

Once the 4-day or 14-day start-up period is done, allow the free available chlorine residual to drop to 0.5 ppm (by reducing the amount of chlorine you add) then:

When:	What to do:
Every day	Run pump and filter at least six (6) hours every day.
Once a week	Balance pH and total alkalinity.
Twice a week	Check chlorine residual; add chlorine to maintain at least a $0.5\mathrm{ppm}$ range using the chart below.
As needed	If water is hazy, superoxidize with chlorine according to manufacturer's instructions.  Additional shocking is recommended following rainstorms or heavy bather load.  Do not re-enter the pool if the free available chlorine residual is over 3 ppm.

### Add the following amounts of chlorine per 10,000 gallons of water to increase free chlorine by 0.5 ppm.

Type of Chlorine Containing Compound	% Active Ingredient	% Available Chlorine Content	Ounce Quantity Required	Gram Quantity Required
Sodium Hypochlorite Liquid	5.25	5.25	12.7	361
Sodium Hypochlorite Liquid	9.2	9.2	7.3	206
Sodium Hypochlorite Liquid	10	10	6.5	184
Sodium Hypochlorite Liquid	12	12	5.6	158
Calcium Hypochlorite	65	64	1.1	30
Dichloroisocyanurate	99	62	1.1	30
Lithium Hypochlorite	29	35	1.9	54
Trichloro-s-triazintrione	99	90	0.7	21
Chlorine Gas, from any source including chlorine generators	100	100	0.7	19

## **Provide Filtration/Circulation**

To manage:	You need to:
Circulation	Follow the manufacturer's directions for keeping the circulating pump in good working order and operate it at least six (6) hours a day.
	Consult your Nature <sup>2</sup> dealer for optimum run times.
Filtration	Check the pool's filter periodically and clean it as recommended by the manufacturer.

# **Troubleshooting Guide**

	Problem	What to look for	
Cloudy water Frequently caused by improper start up. See section on Start Up and Install the Cartridge.	Poor filtration	Slow filter turnover rates	
	Algae growth	Hazy pool water; may have slightly green appearance.	
	Unbalanced water	<ul><li>1 High hardness</li><li>2 High TDS (total dissolved solids)</li><li>3 High pH</li><li>4 High total alkalinity</li></ul>	
Algae Algae may be caused by	Green algae	Pea green color; attaches to pool walls; sometimes colors the entire body of water	
insufficient levels of oxidizer and/or	Black algae	Black spots on pool walls	
inadequate water circulation.	Mustard algae	Yellow or brown film on steps or walls	
	<b>Note:</b> Regular algaecide treatments are recommended for outdoor pools that experience persistent algae problems. Do not use algae treatments containing copper.		
Stains	Blue/green	Copper or iron from pool equipment corrosion or water supply	
	Red/brown	Iron or manganese from equipment corrosion or water supply.	
	Black	Manganese in water supply.	
	Metal tarnishing	High native mineral content in water; unbalanced water	
Scale	Crusty deposits on pool surfaces	High pH and high total alkalinity	
		High TDS (total dissolved solids) or high hardness levels	

### Consult your Nature<sup>2®</sup> Dealer for additional assistance or call 1-800-822-7933.

#### **Treatment**

- 1 Backwash and clean filter.
- 2 Run filter for 24 hours.
- 3 Increase run time per day.

Superchlorinate water with chlorine according to manufacturer's instructions and brush pool walls.

Balance the pool water.

- 1 Check pH and adjust if necessary.
- 2 Superchlorinate with chlorine according to manufacturer's instructions and brush pool walls.
- 3 Repeat steps 1 and 2 until algae is gone.
- 1 Brush affected areas.
- 2 Superchlorinate water with chlorine according to manufacturer's instructions.
- 3 Add algaecide.
- 4 Vacuum pool.
- 5 Repeat steps 1 through 4 until algae is gone.
- 1 Adjust pH and total alkalinity to ideal ranges.
- 2 Vigorously brush stained areas.
- 3 Add sequestrant.
- 4 Run filter.
- 5 Twelve hours later, superchlorinate the pool.
- 6 Test and balance water.
- 7 Test pool water for dissolved metals.

Clean with soft cloth and mild detergent.

Test water for minerals; use a sequestrant;

and maintain water balance.

Adjust pH and total alkalinity to ideal ranges.

- 1 Replace a volume of pool water with water low in hardness and dissolved solids.
- 2 Use sequestrant to prevent scale buildup if high hardness levels are a continuing problem.

# Nature<sup>2®</sup> Cartridge Replacement Intervals

Always turn pump off prior to installing or changing Nature<sup>2</sup> CF cartridge. Your pump/filter is operated under pressure and the pressure must be released before you begin work. Please see your pump/filter owner's manual for further instructions.

A cartridge lasts six (6) months or one (1) season, whichever is shorter. The cartridge should not be used longer than six (6) continuous months.

## **Winterizing Your Pool**

Use these steps as a guide. Consult your dealer for specific information in your area.

### Warm Climate

- Reduce the number of hours the pump runs since the cooler weather decreases the spread of algae and other pollutants.
- There is no need to superoxidize the pool during cool weather unless the water becomes cloudy (as may occur after a winter storm). See Cloudy Water in Troubleshooting section.

### **Cold Climate**

- 1. Check total alkalinity and pH of pool to make sure that they are in proper balance.
- 2. **Vacuum the pool bottom** to remove any debris or other potential contaminants.
- 3. Superoxidize the pool with chlorine according to manufacturer's instructions to clear the water.
- 4. Add a winter algaecide following manufacturer's instructions.

**Important**: Do not use a winter algaecide with copper in it. This will void the Nature<sup>2</sup> no-stain warranty.

- Backwash the filter.
- Drain part of the pool water. The amount to drain varies from one part of the country to another. Consult your dealer for advice.
- 7. Remove the Nature<sup>2</sup> cartridge and discard with household trash.
- 8. **Winterize the pipes** with pool antifreeze following manufacturer's instructions.
- 9. **Drain the water** out of all equipment (pump, filter, etc.).
- 10. **Store** all baskets, hoses and cleaning equipment, indoors if possible.
- Cover the pool with a winter cover.

## Disposal

After six (6) months of use, discard Nature<sup>2</sup> cartridge in household trash. Do not save the cartridge for re-use. The cartridge is manufactured with the mineral media sealed inside. In the unlikely event a cartridge breaks, remove it and vacuum out any media introduced into the pool.

## **Limited Warranty**

#### LIMITED WARRANTY

The limited warranties contained within this document are the only warranties given with your Nature<sup>2®</sup> CF cartridge and supercede any prior warranties. **All other warranties, expressed or implied, including the implied warranty of merchantability or the implied warranty of fitness for a particular purpose are hereby disclaimed.** Our sole obligation under this warranty, and the purchaser's sole remedy, is limited to repair or replacement of the Nature<sup>2</sup> CF. The warranty applies to the original owner only.

### THE LIMITED WARRANTIES OF THE NATURE<sup>2</sup> CF SANITIZER:

Nature<sup>2</sup> CF is warranted to be free of defects in materials and to perform satisfactorily for a period of six (6) months from the date of purchase. Nature<sup>2</sup> CF cartridges are warranted not to cause copper staining in your pool. This limited warranty requires that you exercise reasonable care of your pool and keep water in balance at all times and not use a copper-based algaecide. This limited warranty does not cover discoloration to chromium fittings. This warranty does not cover cartridges used with any biguanide products. If the cartridge is defective and does not perform satisfactorily for the entire six (6) months, we will replace your cartridge.

#### **EXCLUSIONS FROM WARRANTY**

Nature<sup>2</sup> CF is designed for use on inground and aboveground pools with cartridge filters from 5,000 to 25,000 gallons. If it is used in any other application, the warranty is void, and the purchaser and/or pool owner releases the manufacturer from any and all claims related to the use of the Nature<sup>2</sup>.

This warranty does not cover problems arising in whole or in part from purchaser's negligence, misuse or abuse, improper maintenance or storage, accident, improper installation, improper application, failure to follow all appropriate safety precautions, Acts of God, abnormal weather conditions, damage from plants or animals, and improper use of chemicals.

This warranty specifically excludes all incidental or consequential damages, except where state law requires them to be paid. This warranty gives you specific rights. You may have other rights that vary from state to state.

#### TO SUBMIT A CLAIM

Report claims to Zodiac Pool Systems LLC by calling 1-800-822-7933. Only the original purchaser may submit a claim under this limited warranty. All claims must be accompanied by an original purchase receipt.

### **ZODIAC POOL SYSTEMS LLC**

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