The Mineral Pool Sanitizer
The Low Chlorine Alternative*
Destroys bacteria with CRT

For Inground and Aboveground Pools With Cartridge Filters

Active Ingredients:
- Metallic Silver** .................................. 3.51%
- Copper Sulfate Pentahydrate*** .............. 8.23%
- Natural Ingredients: .......................... 88.26%
- TOTAL ........................................ 100.00%

**From Silver Nitrate
***Copper (Cu) as Metallic ...................... 2.09%
*The Nature2® System consists of the patented Nature2® technology used in conjunction with a chlorine delivery device or 0.5 ppm of an EPA registered chlorine pool product.
**Nature2® technology consists of the minerals silver and copper.

Keep out of reach of children
Caution
See back panel for additional precautionary statements.

Net Contents:
One (1) Cartridge

The Low Chlorine Alternative*
Nature2® water is brilliantly clear and soft:
- Reduces potential for stinging eyes, skin irritation, and unpleasant odors
- Enhances swimmer comfort
- Lower chlorine levels help keep the pool pH balanced

It's Compatible:
- Compatible with most pool maintenance products****
- Will not damage your pool equipment

Debris in unfiltered pool water is trapped by the cartridge element. Filtered water then passes through the Nature2® SP Mineral Sanitizing System* and re-enters the pool.

****Do not use Nature2® SP with copper-based algaecides or biocides.
The Mineral Pool Sanitizer
The Low Chlorine Alternative

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.

DIRECTIONS FOR USE
It is a violation of Federal law to use this product in a manner inconsistent with its labeling. See owner's manual inside box for directions for use.

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

CHANGE THIS CARTRIDGE EVERY SIX (6) MONTHS
Use of this cartridge for longer than six (6) continuous months will void the warranty. Discard this cartridge at the end of six (6) months.

© Zodiac Pool Systems, Inc.
2620 Commerce Way
Vista, CA 92081-8438

©2009 Zodiac Pool Systems, Inc.

The Association of Pool & Spa Professionals

Assembled in USA from components made in USA and China.
W12248 Rev-A
Nature\textsuperscript{2} SP
for Cartridge Filters
For Inground Pools and Aboveground Pools

Owner’s Manual
This owner’s manual cover the following Nature\textsuperscript{2} SP cartridges:
N2CN25 - For pools 5,000 - 25,000 gallons  
N2CW25 - For pools 5,000 - 25,000 gallons
N2CN35 - For pools 25,000 - 35,000 gallons  
N2CW35 - For pools 25,000 - 35,000 gallons

\begin{center}
\textbf{IMPORTANT}  
Pool Owner, save this manual! Builders, leave this manual with the pool owner!
\end{center}

\begin{center}
\textbf{ATTENTION}  
Failure to heed the following can result in permanent injury or drowning.
\end{center}

\begin{center}
\textbf{EQUIPMENT UNDER PRESSURE}  
\begin{itemize}
\item Always turn pump off prior to installing or changing Nature\textsuperscript{2} 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.
\end{itemize}
\end{center}

\begin{center}
\textbf{PREVENT CHILD DROWNING}  
\begin{itemize}
\item 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.
\end{itemize}
\end{center}

\begin{center}
\textbf{LOW CHLORINE RECIPE}  
\begin{itemize}
\item 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.
\end{itemize}
\end{center}

\begin{center}
\textbf{CAUTION}  
\end{center}

\begin{center}
\textbf{PRECAUTIONARY STATEMENT}  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
\end{center}

\begin{center}
\textbf{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.
\end{center}

\begin{center}
\textbf{FIRST AID}  
IF INGESTED: Call poison control center or doctor immediately for treatment advice.
\end{center}

The Nature\textsuperscript{2} SP Sanitizer is designed only for residential swimming pools.

* The Nature\textsuperscript{2} System consists of the patented Nature\textsuperscript{2} technology used in conjunction with a chlorine delivery device or 0.5 ppm of an EPA registered chlorine pool product.

* Nature\textsuperscript{2} 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 Nature2® SP. 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 Nature2 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 Nature2® SP dealer can provide advice and service.

CONTENTS
Safety Instructions .........................................................1
Start Up ................................................................2
Balance the Water ........................................................3
Install the Cartridge ....................................................3
Recipe ..................................................................4
Provide Filtration/Circulation .....................................4
Nature2® SP Cartridge Replacement Intervals ...............5
Winterizing Your Pool ................................................5
Disposal ................................................................6
Troubleshooting Guide ..............................................6
Limited Warranty .......................................................8

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

NATURE2® SP COMPATIBILITY
Nature2® Systems can be used with all types of pool chemical treatments available except biguanide products and copper based algaeicides.

Important: When converting either a biguanide or bromine treated pool to the Nature2® low chlorine System, the pool must be completely drained and refilled. Then follow the Nature2® cartridge start-up procedure below.

Important: Please make sure that the Nature2® SP cartridge you have selected corresponds to your swimming pool size based on gallons of water. Using a Nature2® SP cartridge for an undersized pool may cause staining of the pool.

Start Up

• Before starting up a new Nature2® SP 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 Nature2® SP cartridge.
  - pH 7.4-7.8
  - Calcium hardness 200-400 ppm
  - Total alkalinity 80-150 ppm

Consult with your Nature2® 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.

<table>
<thead>
<tr>
<th>Element: pH</th>
<th>If it's too low:</th>
<th>The surface of your pool can become etched. Metal parts in the pump and plumbing will corrode.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range: 7.4-7.8</td>
<td>How to fix:</td>
<td>Add pH increaser.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element: Calcium Hardness</th>
<th>If it's too low:</th>
<th>Water is less stable. In plaster pools, the calcium is taken out of the plaster, causing the surface to deteriorate.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range: 200-400 ppm</td>
<td>How to fix:</td>
<td>Add calcium hardness increaser.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element: Total Alkalinity</th>
<th>If it's too low:</th>
<th>It provides no buffer so that you constantly get fluctuating pH readings, which can damage equipment and pool surfaces.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range: 80-150 ppm</td>
<td>How to fix:</td>
<td>Use an alkalinity increaser.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element: Total Alkalinity</th>
<th>If it's too high:</th>
<th>Rough, discolored deposits (&quot;scale&quot;) will form on the pool surface and inside pool equipment.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How to fix:</td>
<td>Drain or dilute the pool water. Consult your dealer.</td>
</tr>
</tbody>
</table>

| Install the Cartridge |

1. Install the cartridge after water is balanced. See the Nature SP for Cartridge Filter operating manual for additional instructions regarding your particular model’s installation.

2. 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 Nature2® pool.

Low-Chlorine Recipe

Ingredients:
- Nature2® SP 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 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.

<table>
<thead>
<tr>
<th>Type of Chlorine Containing Compound</th>
<th>% Active Ingredient</th>
<th>% Available Chlorine Content</th>
<th>Ounce Quantity Required</th>
<th>Gram Quantity Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hypochlorite Liquid</td>
<td>5.25</td>
<td>5.25</td>
<td>12.7</td>
<td>361</td>
</tr>
<tr>
<td>Sodium Hypochlorite Liquid</td>
<td>9.2</td>
<td>9.2</td>
<td>7.3</td>
<td>206</td>
</tr>
<tr>
<td>Sodium Hypochlorite Liquid</td>
<td>10</td>
<td>10</td>
<td>6.5</td>
<td>184</td>
</tr>
<tr>
<td>Sodium Hypochlorite Liquid</td>
<td>12</td>
<td>12</td>
<td>5.6</td>
<td>158</td>
</tr>
<tr>
<td>Calcium Hypochlorite</td>
<td>65</td>
<td>64</td>
<td>1.1</td>
<td>30</td>
</tr>
<tr>
<td>Dichloroisocyanurate</td>
<td>99</td>
<td>62</td>
<td>1.1</td>
<td>30</td>
</tr>
<tr>
<td>Lithium Hypochlorite</td>
<td>29</td>
<td>35</td>
<td>1.9</td>
<td>54</td>
</tr>
<tr>
<td>Trichloro-s-triazinione</td>
<td>99</td>
<td>90</td>
<td>0.7</td>
<td>21</td>
</tr>
<tr>
<td>Chlorine Gas, from any source</td>
<td>100</td>
<td>100</td>
<td>0.7</td>
<td>19</td>
</tr>
</tbody>
</table>

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 Nature2® dealer for optimum run times.

Filtration Check the pool’s filter periodically and clean it as recommended by the manufacturer.
Nature2® SP Cartridge Replacement Intervals

Always turn pump off prior to installing or changing a Nature2® SP 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.

In frost-belt regions (3-6 month pool season): Discard your used system when you close your pool at the end of the season. Install a new system when you open your pool in the spring.

In sun-belt regions (7-12 month pool season): Replace your Nature2 SP cartridge every six (6) months whether or not you plan to use the pool for swimming.

Winterizing Your Pool

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

Warm Climate

1. Reduce the number of hours the pump runs since the cooler weather decreases the spread of algae and other pollutants.
2. 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 algaeicide following manufacturer’s instructions.

Important: Do not use a winter algaeicide with copper in it. This will void the Nature2 no-stain warranty.
5. Backwash the filter.
6. 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 Nature2 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.
11. Cover the pool with a winter cover.

Disposal

After six (6) months of use, discard Nature2 SP cartridge in household trash. Do not save the cartridge for reuse. 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.
### Troubleshooting Guide

<table>
<thead>
<tr>
<th>Problem</th>
<th>What to look for</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cloudy water</strong></td>
<td></td>
</tr>
<tr>
<td>Poor filtration</td>
<td>Slow filter turnover rates</td>
</tr>
<tr>
<td>Algae growth</td>
<td>Hazy pool water; may have slightly green appearance.</td>
</tr>
</tbody>
</table>
| Unbalanced water  | 1. High hardness  
|                | 2. High TDS (total dissolved solids)  
|                | 3. High pH  
|                | 4. High total alkalinity  |
| **Algae**  |  |
| Green algae  | Pea green color; attaches to pool walls;  
|              | sometimes colors the entire body of water  |
| Black algae  | Black spots on pool walls  |
| Mustard algae | Yellow or brown film on steps or walls  |

**Note:** Regular algaecide treatments are recommended for outdoor pools that experience persistent algae problems. Do not use algae treatments containing either copper or sodium bromide.

<table>
<thead>
<tr>
<th><strong>Stains</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue/green</td>
<td>Copper or iron from pool equipment corrosion or water supply</td>
</tr>
<tr>
<td>Red/brown</td>
<td>Iron or manganese from equipment corrosion or water supply.</td>
</tr>
<tr>
<td>Black</td>
<td>Manganese in water supply.</td>
</tr>
<tr>
<td>Metal tarnishing</td>
<td>High native mineral content in water; unbalanced water</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Scale</strong></th>
<th></th>
</tr>
</thead>
</table>
| Crusty deposits on pool surfaces  | High pH and high total alkalinity  
| | High TDS (total dissolved solids)  
| | or high hardness levels  |
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 water (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.
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; 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.
Limited Warranty

NATURE² SP LIMITED WARRANTY
The limited warranties contained within this document are the only warranties given with your Nature² SP Cartridge and supersede 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 Nature² SP Cartridge. The Nature² SP warranty applies to the original owner only.

THE LIMITED WARRANTIES OF THE NATURE² SP SANITIZER
Nature² SP is warranted to be free of defects in materials and to perform satisfactorily for a period of six months from the date of purchase. Nature² SP 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 algicide. 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 months, we will make a prorated rebate based on your actual period of use. You are responsible to pay the below-indicated percentage on the then applicable retail cost: < 1 month-0%; 1-2 months- 25%; 3-4 months- 50%; 5-6 months- 75%.

EXCLUSIONS FROM WARRANTY
Nature² SP is designed for use on pools with cartridge filters from 5,000 to 25,000 gallons (N2CN25, N2CW25) or 25,000 - 35,000 gallons (N2CN35, N2CW35). 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 Nature² SP.
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, Inc. 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.