# **Understanding**



# Long Life Algicide 1-800-FOR SWIM

# **INTRODUCTION** For the \*First Time\*

## User of Kleen Pool

Congratulations on your first purchase of Kleen Pool Longlife Algicide. You have just made an important decision that will make your life more enjoyable by reducing the time and effort required to maintain your pool.

One simple treatment of Kleen Pool will free you from the problems caused by algae blooms, discoloration and hazes which can affect the appearance of pool water. And one treatment will last up to <u>six</u> months.

The Kleen Pool system is designed to control algae growths all year round. With the Kleen Pool system you use disinfectants such as chlorine or bromine only to control bacteria.

If you live in a region of the country that necessitate covering and winterizing your pool, Kleen Pool will keep the water clear and free of algae without the use of other chemicals.

# For the \*Continuous\*

# <u>User of Kleen Pool</u>

If you have used Kleen Pool before, you know what a difference Kleen Pool has made to your pool and how it has increased the time you spend <u>enjoying</u> your pool.

You may not know that you should <u>always</u> test the Kleen Pool level (copper level) in your pool before you add your next dosage of Kleen Pool. You may <u>not</u> need to add a full dosage, especially after the winter time because algae is not very active in the winter and you may have a high level of Kleen Pool still present.

Your pool dealer can assist you with this copper test. It is a good idea to have a complete water analysis done in the Spring when you open your pool, and in the Fall when you close it, so you can properly balance the pool water at these important times.

<u>Note:</u> Kleen Pool is effective on all types of pool surfaces and liners, and can be used in salt-chlorinated pool.

# <u>Calculating the</u> <u>Number of Gallons</u>

## <u>in your Pool</u>

**Dosage:** One half gallon of Kleen Pool for each 10,000 gallons of pool water.

#### **RECTANGULAR POOL**

Length x Width x Average Depth x 7.5 = Total gallons



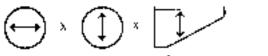
#### **OVAL POOL**

Long Diameter x Short Diameter x Average Depth x 6.7 = Total Gallons



#### CIRCULAR POOL

Diameter x Diameter x Average Depth x 5.9 = Total Gallons



x 5.9 = TOTAL GALLONS

# DIRECTIONS

NOTE: Do <u>not</u> use in pools with plaster surfaces less that <u>18</u> months old walls have not hardened sufficiently. The water properties in this pool <u>must</u> be in the proper ranges for your area before adding Kleen Pool.

**DOSAGE RATES:** For one six month treatment, use one half gallon of Kleen Pool per 10,000 gallons of pool water. Kleen Pool Algicide level should be maintained between 0.2 ppm and 2.0 ppm as shown on the Kleen Pool Test Kit.

### \*APPLICATION\*

- 1) **Adjust your pool pH to 7.2.** Total Alkalinity should be in the range of 80-120.
- Brush floors and walls of your pool before adding Kleen Pool to loosen algae. Black algae should be brushed daily.
- 3) FOR POOLS \*WITH\* VISIBLE ALGAE: Shock with a liquid form of chlorine on Day 1, wait 24 hours then adjust the pH to 7.2 and add Kleen Pool.

#### FOR POOLS \*WITHOUT\* VISIBLE ALGAE:

Add the recommended dose of Kleen Pool and circulate.

Kleen Pool Algicide is concentrated. Pour

Kleen Pool directly into pool. Do not pour Kleen Pool through a skimmer. Continuous pool circulation is recommended for at least eight hours after application. Swimming can occur immediately after adding Kleen Pool.

- 4) **Use a filter or vacuum** to remove dead algae that may appear in the form of white or green cloudy water after 24 hours.
- 5) Add chlorine at the recommended level. For best results while using Kleen Pool, use a liquid chlorine, or predissolved granular chlorine, when sanitizing or shocking your pool. Stabilized chlorine tablets can also be used with Kleen Pool.
- 6) Maintain pH of your pool water between 7.2 and 7.6. Check your pH and chlorine level once or twice a week during swim season and every other week in the winter. Your pool dealer can assist you with this.

In pools with heavy algae growth, Kleen Pool will rupture most algae cells within 24 hours. A badly affected pool may require more than 24 hours to totally destroy the algae cells.

It should be noted that after cell rupture has occurred, the pool water and

surfaces will retain a characteristic white or green cloudiness for several days. This is due to the chlorophyll molecule in the algae cell being liberated and suspended in the water.

This water coloration will slowly dissipate as the chlorophyll naturally breaks down. When this occurs, it is important to use a good filter or vacuum to remove the dead algae, dust and debris. Use of a water clarifier will usually speed up this process.

If excessive discoloration still exists after 48 hours, faster water clarity may be achieved by super chlorination. Be sure to maintain the pH level between 7.2 and 7.6.

Add chlorine disinfectant to pool water at the recommended manufacturer dosages.

Kleen Pool users should use a <u>liquid</u> chlorine (sodium hypochlorite), or predissolved granular chlorine (calcium hypochlorite), when sanitizing or shocking your pool.

**IMPORTANT:** See bottle label or end of this booklet for Precautionary Statements and Hazards.

### YOUR POOL pH

## The pH level of your pool water should be accurately checked <u>before</u> Kleen Pool is added.

Kleen Pool is an effective and quick-acting algicide in pool water main-

tained in a pH range of 7.2 to 7.6. Higher pH levels will cause the algicide's active life to diminish and algae may reappear.

For Kleen Pool and chlorine to work effectively, the pH control of your pool water is important.

High рĤ 7.8 7.6 7.4 Recommended 7.2 pН 7.0 6.8 Low pН

pH is a measure of the acidic or alkaline qualities of water. pH of 7.0 is neutral pH of <u>greater</u> than 7.0 is alkaline. pH of <u>less</u> than 7.0 is acidic

### pH and Kleen Pool

The recommended, constant pool pH level for Kleen Pool is 7.2., or a range of 7.2 to 7.6.

Kleen Pool is still effective below a pH level of 7.2, but when above 7.6 its active life is reduced significantly. In some cases, high pH levels above 7.8 may cause the algicide action to cease and algae may reappear. Lowering the pH to the proper range will cause the algicide to work again but the life of the product may be decreased.

**Note:** Kleen Pool is <u>not</u> recommended for pools where the pH level cannot be maintained in the 7.2 to 7.6 range.

### How to Raise or Lower pH

Soda ash or "ph up" raises the pH level of pool water.

Acid or "pH down" lowers the pH.

When adding either of these chemicals to your pool water, follow the manufacturer's directions.

### Chlorine and Kleen Pool

Although Kleen Pool Algicide eliminates excessive use of chlorine, it will <u>not</u> destroy pathogenic bacteria. You must maintain the necessary level of a pool disinfectant, such as chlorine or bromine, in your pool to kill bacteria.

A <u>liquid</u> chlorine, or predissolved granular chlorine, is recommended for users of Kleen Pool. Stabilized chlorine tablets can also be used with Kleen Pool.

High levels, or new doses of granular chlorine in a pool with Kleen Pool may result in cloudy or "milky" looking water. For this reason, a lower level of chlorine is recommended. A clean, properly-working filter system and a good water clarifier should eliminate this cloudiness.

### pH and Chlorine

The efficiency of free chlorine as a sterilizing agent is related to the pH of the pool water (i.e.: as the pH of the pool water rises, the killing rate of free chlorine on bacteria decreases). See the chart on page 10 for specific rates.

|                 | <u>Chlorine</u>      |
|-----------------|----------------------|
| <u>ph level</u> | <u>Killing Power</u> |
| 7.0             | HIGHEST KILL RATE    |
| 7.2             | 61%                  |
| 7.4             | 50%                  |
| 7.6             | 30%                  |
| 7.8             | 15%                  |
| 8.0             | LOWEST KILL RATE     |

**Warning:** Do not allow your pH to rise above 7.8.

**Important:** It can be seen from the table above that to maintain the same bacteria kill rate when your pool has a pH of 7.8, you would need to use approximately <u>four times more chlorine</u> than you would if the water was maintained at a pH of 7.2.

It is important that you use a reliable and accurate pH test kit to maintain your pool within the recommended pH range. Test kit reagents should be checked for accuracy and changed periodically.

<u>Caution:</u> Do not use granular chlorine when using Kleen Pool <u>unless</u> it is diluted <u>before</u> being added to the pool. Any remaining undissolved granules should be discarded and <u>not</u> added to the pool water. Granular chlorine should <u>never</u> be <u>broadcast</u> directly into ones' pool when using Kleen Pool.

For best results, liquid chlorine, or predissolved granular chlorine, is recommended when sanitizing or shocking your pool.

### Scale and Kleen Pool

Scale is a build-up of calcium carbonate on pool walls, filter or heater. Calcium originates from a number of sources, one being your water supply (well water is known for its high calcium or "hard water" characteristics). Another source is the continuous use of granular chlorine.

Kleen Pool should be used with caution in pools with scale. The presence of scale makes it difficult to maintain the recommended pH level, and in addition, the scale may discolor the surface of your concrete pool walls. pH control is difficult because acid added to pool water initially lowers the pH but the scale neutralizes the acid and the pH will rise again.

#### Warning: Use Kleen Pool with care in pools that have a calcium level above 400 ppm. Pools with scale <u>should</u> be de-scaled <u>before</u> using Kleen Pool.

In pools with high calcium levels and scale, <u>half</u> dosages of Kleen Pool can be used once every <u>three</u> months with very good results.

Normal calcium levels for residential pools should be 200-400 ppm. If your calcium level is above or below this range, your pool dealer can assist you to bring it into the proper range.

### Winterizing Your Pool

After the swim season has ended and your pool will not be used for swimming, Kleen Pool Algicide will keep it free of algae and crystal clear for up to another six months.

Some think it is not necessary to add an algicide during the winter months because algae does not grow in cold pool water. The reality is that algae spores are always present and they can bloom immediately when the water warms.

A long life algicide like Kleen Pool should still be present in your pool water in the Spring when the algae spores bloom and Kleen Pool will kill them before they can multiply.

To winterize, add a shock dosage of liquid, or pre-dissolved granular chlorine, adjust the pH to 7.2 then add Kleen Pool and maintain the pH level between 7.2 and 7.6. You can then cover the pool or leave as is until swimming season occurs again next year.

Your pool dealer may recommend additional steps for winterizing that are helpful for your particular area.

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed. Wear protective eyewear (goggles or face shield). Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

#### FIRST AID

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes.

- Remove contact lenses. If present after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

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

- Have a person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center doctor.
- Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing.

- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN: Probably mucosal damage may contraindicate the use of gastric lavage.

MISC: Chlorinated pool water may cause discoloration to blonde, bleached or damaged hair. Kleen Pool ™ Algaecide in pool water will not cause discolorating.

**ENVIRONMENTAL HAZARDS:** This product is toxic to fish. Treated effluent should not be discharged in lakes, ponds or public water.

**DISPOSAL:** Securely wrap original container in several layers of newspaper and discard in trash.

#### NOTICE

Florida Water Works, Inc., as the seller makes any warranty, guarantee or representation, expressed or implied, concerning this material except that it conforms to the chemical description on the label. None shall be held responsible in any manner for any personal injury or property damage or other type of loss resulting from the handling, storage, and use of this material not in strict accordance with directions given herewith.

# 1-800-FOR-SWIM

### FLORIDA WATER WORKS, INC.

P.O. Box 471267 Lake Monroe, FL 32747 (407) 324-4994 Fax (407) 936-0968

**Revision, March 2007**