

DANGER

See label for details

See label for details

See label for details

Net Contents
2 1/2 Gallons

At Last!
A Substitute for
Chlorinating Chemicals for Pools

BAQUACIL

Swimming Pool Sanitizer and Algistat



ICI Americas Inc.
Wilmington, Delaware 19897

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER:

CORROSIVE CAUSES EYE DAMAGE. HARMFUL

Do not get concentrate in eyes. Avoid contact with clothing. Avoid breathing spray or mist. Wash thoroughly after handling. Wear goggles and gloves when handling concentrate. Keep container closed.

First Aid:

In case of contact with concentrate, immediately flush eyes with plenty of water for at least 15 minutes. Call physician. If redness, itching or a burning sensation following skin contact, get medical attention.

If swallowed, drink plenty of water or milk immediately. Call physician. Wash clothing and shoes before reuse.

Note to Physician:

The potential hazard from ingestion of concentrated product to mucous membranes of the eyes is slight.

Environmental Hazards:

This product is toxic to fish. Do not contaminate water by cleaning of equipment or disposal of waste. Do not discharge concentrated products or treated water into lakes, streams, or public water supplies without an NPDES permit. For more information, contact the EPA.

STATEMENTS:
ANS AND DOMESTIC ANIMALS

EYE DAMAGE. HARMFUL IF SWALLOWED

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streams, or public waters unless in
NPDES permit. For guidance, consult
of the EPA

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner other than for which it was intended.

Treating the Pool

Pools Previously Treated with Chlorinating Chemicals

Important - BAQUACIL is incompatible with chlorinating chemical products.

Check with chlorine test kit for free and combined chlorine prior to the beginning of neutralization. To neutralize chlorine, ADD a warm solution containing 1 pound of 90% purity sodium thiosulfate (BAQUA-START) or sodium sulfite (CHEM-OUT) per 50,000 gallons pool water. Filter overnight. Check with chlorine test kit. If chlorine is detected, repeat neutralizer treatment.

Freshly Filled and Dechlorinated Pools

Start with BAQUACIL.

- Backwash or clean pool filter. Check pool pH, adjust to 7.2-7.6 if necessary.
- Add BAQUACIL to give a content of 50 ppm (1 gallon product/20,000 gallons pool water).
- After 24 hours, check pH and BAQUACIL content. Add more BAQUACIL to tank and adjust if necessary.

Normal Pool Routine

- Check water level daily. Add water as needed.
- Check pH daily. Adjust to 7.2-7.6 if necessary.
- Check BAQUACIL content daily. Add more as needed to maintain 50 ppm.

Pool Owners Guide to BAQUACIL for application instructions.

NOTE: BAQUACIL AND CHLORINE ARE INCOMPATIBLE.

Refer to the BAQUACIL Pool Owner's Guide for information on how to deal with accidental chlorination or for recommended procedure for conversion to chlorinating sanitizers.

Problem Solving and Supplemental Pool Information

BAQUACIL is not recommended for spa baths or pools equipped with jet streams due to excessive foaming.

BAQUACIL is not compatible with many detergents and some supplemental algaecides.

Algae development, cloudiness, or pool problems occur or additional information on water quality is desired, consult the BAQUACIL trouble shooting guide which is available from your local BAQUACIL retailer.

STORAGE AND DISPOSAL

Keep container closed when not in use. **PROTECT FROM FREEZING.**

In case of leak or spill, soak up with absorbent such as sand, earth or sawdust and shovel into waste container. Remove waste to chemical waste area and dispose of in accordance with local pollution regulations.

Do not reuse empty container. Triple rinse with water. Empty container and setting for future use for swimming pool water. Do not reuse empty container for any other liquid or solid material.

BAQ
Swimming

Swim in
enjoy the

- Beautiful
- Effective
- Control
- Very safe
- Only ever
- No corrosion
- No construction
- No access
- No maintenance
- No mixing

The product has a royalty of 25% of the product 4014 676 the will upon request per pound of other sources.

Not to be BUYER description on the label in accordance with directions for use. This product is not a reason for SELLER DISCUSS WARRANTY OF SPECIAL INDIRECT DAMAGES. Buyers should consult their own local laws.

It is a violation of federal law to use this product in a manner other than for which it was intended.

Pools Previously Treated with Chlorinating Chemicals

Check with chlorine test kit for free and combined chlorine prior to the beginning of neutralization. To neutralize chlorine add a warm solution containing 1 pound (90% purity sodium thiosulfate (AQUA-START) or sodium sulfite (HEM-OUT®) per 50,000 gallons pool water. Filter overnight. Check with chlorine test kit. If chlorine is detected repeat neutralizer treatment.

Start-up with BAQUACIL

After 24 hours, check pH and BAQUACIL concentration with the BAQUACIL Test kit and adjust if necessary.

Every week there is BA20AC
concentration and on

Maintain BAC: _____
 about 50 ppm (normal) to 100 ppm (upper limit)
 100 ppm or more indicates _____
 eye should be _____
 below 30 ppm, consult the _____

Refer to the BAQUACIL Pool Owners Guide for information on how to deal with accidental chlorination or for recommended procedure for conversion to chlorinating sanitizers.

If algae development, cloudiness, or other problems occur, an additional form of control on water quality is desired. Consult the BAQUACIL trouble shooting guide, which is available from your local BAQUACIL retailer.

Fee: \$100 per person (includes dinner and drinks)

In case of leak or spill, soak up with absorbent such as sand, earth or sawdust and shove into waste container. Remove waste to normal waste area and dispose in accordance with local regulations.

1. The Board of Directors of the Corporation shall have the right to elect and remove the President, Vice President, Secretary and Treasurer of the Corporation, and to elect and remove any other officers or directors of the Corporation.

Swimming Pool Sanitizer and Algistat

- Beautifully clear sparkling water.

- Effectively controls pool bacteria.
- Controls most pool algae.
- Very stable in use: typically requires dosing only every 2 to 3 weeks.
- No corrosion of pumps, pipework, filters, construction materials or other pool accessories as long as pool pH is properly maintained.
- No mixing required.

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Pool Owners
Guide to

BAQUACIL

Swimming Pool Sanitizer and Algistat

EPA Reg. No. 10152-19

BAC-1



ICI Americas Inc.

An Introduction to BAQUACIL

This booklet contains full instructions on how to use BAQUACIL swimming pool sanitizer for a clear, sparkling hygienic pool throughout the season.

It is important to realize that BAQUACIL is not just another pool chemical but represents a patented substitute for chlorinating chemicals for swimming pool treatment, which is the result of extensive research and development by ICI. BAQUACIL is a powerful bactericide and is also effective against a wide range of algae. BAQUACIL is stable in use. Experience has shown that, on average, one BAQUACIL addition every two weeks is all that is required.

Major benefits of BAQUACIL use are:

- beautifully clear sparkling water
- effectively controls pool bacteria
- controls most pool algae
- very stable in use; typically requires dosing only every 2 to 3 weeks
- no corrosion of pumps, pipework, filters, construction materials or other pool accessories as long as pH and water balance are properly maintained
- no mixing required

Contents

How to Use BAQUACIL

- Start-Up Procedure
- Pools Previously Treated with Chlorine
- Freshly Filled Pools

BAQUACIL Maintenance

- Weekly Checks
- General Care
- Winterizing a Pool with BAQUACIL

How to Use BAQUACIL in a Spa

Conversion Chart for Chlorinating Salt

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The name BAQUACIL is a registered trademark of ICI Limited, UK.
ICI is a registered trademark of ICI Limited, UK.

ICI Limited, UK

How to Use BAQUACIL

IMPORTANT

BAQUACIL is a new type of chlorine sanitizer for swimming pools. It is a powerful sanitizer that kills bacteria and algae. It is also a powerful oxidizer that removes stains and keeps the water clear. It is a powerful sanitizer that kills bacteria and algae. It is also a powerful oxidizer that removes stains and keeps the water clear. It is a powerful sanitizer that kills bacteria and algae. It is also a powerful oxidizer that removes stains and keeps the water clear.

START-UP PROCEDURE

For Pools Previously Treated with Chlorine

Chlorine-Release Chemicals

1. Remove the chlorinating source (e.g., automatic pool chlorinator system) to make room for further addition of granular or liquid chlorine products.
2. Brush and vacuum the pool.
3. Clean the filter:
 - Sand filter: backwash thoroughly to clear any granular chlorinating particles embedded in the sand. If the sand is to be replaced or chemically cleaned, it is preferable to do this before conversion to BAQUACIL.
 - Diatomaceous Earth (D.E.) filter: elements should be removed and washed in a solution of hydrochloric (muriatic) acid (add 20 parts of commercial concentrated acid to 80 parts of water), then reassembled and coated with fresh diatomaceous earth. Observe handling precautions on the acid product label.
 - Cartridge filters: remove cartridges and wash in a cleaner solution. Rinse off cleaner and replace.
4. Check with chlorine test kit for free and combined chlorine prior to beginning neutralization. To remove the chlorine in your pool water, use sodium thiosulfate or sodium sulfite crystals of 90% purity (BAQUA-START from ICI Americas or CHEM-OUT from Bio-Lab, Inc.). Dissolve in a bucket of warm water and pour the solution into the pool. Use 1.0 pound per 50,000 gallons of pool water to neutralize a free chlorine residual of about 1 ppm. To neutralize higher levels of residual chlorine or to neutralize chlorine in pools of other volumes, use proportionately more or less sodium thiosulfate or sulfite (e.g., for a 10,000 gallon pool, add 0.2 pound). Refer to the labels on these products for further instructions.
5. Filter overnight.
6. Next day check that the chlorine level is zero with your chlorine test kit. If any is still detected, repeat step 4.
7. When the chlorine level is zero, check the pH of the pool water with the BAQUACIL Test Kit and adjust to 7.2-8.0 if necessary.
8. Now follow the procedure given under Freshly Filled Pools (steps 4 to 8).

Freshly Filled Pools

1. Brush and vacuum pool bottom and filter. If the water is dirty after initial filling.
2. Backwash or clean the filter.
3. Check the pH of the pool water with the BAQUACIL Test Kit and adjust to 7.2-8.0 if necessary.
4. Calculate the volume of your pool from Table 1.
5. With the filter running, pour the required amount of BAQUACIL into the water around the sides of the pool to give a concentration of 10 ppm for the volume of your pool. (See Table 2 to determine BAQUACIL dosage required.)
6. Filter continuously for 24 hours. Don't be alarmed if the water becomes cloudy at any time during this operation. This cloudiness confirms that the BAQUACIL is at work taking dissolved substances out of solution. Eventually, these substances will be trapped on the filter, which must be cleaned. This "scavenging" action of BAQUACIL results in water of high clarity. The water should clear within 48 hours.
7. Using the Test Kit, check that the BAQUACIL level is about 40 ppm. If the level is at or below 40 ppm, add a top-up dose. Refer to Table 3 to determine the top-up dose required for your pool. Instructions for using the Test Kit are given on page 7.
8. The pool is now ready to use. The pool water should now be filtered normally. Check the BAQUACIL level and the pH level weekly. (See Normal Maintenance on page 6.)

In order to achieve the highest quality of pool water possible with BAQUACIL, it is imperative that only chemicals recommended in this booklet are used with this product. Some auxiliary pool chemicals (such as many detergents and certain algaecides) are recommended for use with traditional chlorine and chlorine-releasing chemicals, are not compatible with BAQUACIL, and will create problems. For a full list, refer to the BAQUACIL TROUBLE SHOOTING Guide for more information. For a full list, refer to the BAQUACIL retailer for advice.

Table 1

CALCULATING POOL VOLUME

To calculate the volume of your pool, measure the pool dimensions and estimate the volume from the chart below.

Use this volume figure to obtain correct dosages of BAQUACIL for your pool.

CIRCULAR POOLS

Dimensions (in feet)			Approx. Gallons
Diameter		Avg. Depth	
12	x	3	2,500
15	x	4	5,300
20	x	4	9,400
25	x	4	15,000
30	x	4	21,000

RECTANGULAR POOLS

Dimensions in feet				Approx. Gallons
Length		Width	Avg. Depth	
24	x	12	x 4	8,600
30	x	15	x 4	13,500
30	x	15	x 5	17,000
34	x	17	x 5	21,500
32	x	16	x 6	23,000
40	x	20	x 5	30,000
40	x	30	x 5	45,000
50	x	30	x 5	56,000

Note: Use 7.48 gallons per cubic foot if you wish to calculate pool gallonage yourself.

Table 2

STARTUP DOSAGES OF BAQUACIL

Pool* (gallons)	Quantity of BAQUACIL to give 50 ppm
1,000	6 ounces
5,000	1.0 quart
10,000	0.5 gallons
20,000	1.0 gallon
30,000	1.5 gallons
40,000	2.0 gallons
50,000	2.5 gallons
60,000	3.0 gallons
70,000	3.5 gallons
80,000	4.0 gallons
90,000	4.5 gallons
100,000	5.0 gallons
110,000	5.5 gallons
120,000	6.0 gallons
130,000	6.5 gallons
140,000	7.0 gallons
150,000	7.5 gallons
160,000	8.0 gallons
170,000	8.5 gallons
180,000	9.0 gallons
190,000	9.5 gallons
200,000	10.0 gallons

Table 3

ROUTINE POOL TREATMENT

Pool* (gallons)	BAQUACIL Additions	
	Top-Up Dose of 10 ppm	Top-Up Dose of 20 ppm
1,000	1.2 ounces	2.5 ounces
5,000	6 ounces	1 pint
10,000	1 pint	2 pints
20,000	1.5 pints	3 pints
30,000	2.5 pints	5 pints
40,000	3 pints	3 quarts
50,000	2 quarts	1 gallon

Normal Pool Routine

WEEKLY CHECKS

Every week check the BAQUACIL and pH levels using the Test Kit. Instructions for using the Test Kit are given on page 71.

The BAQUACIL level should be maintained at approximately 50 ppm. Do not add BAQUACIL if your kit reading is about 50 ppm. If the level has fallen 10 or more ppm, add a top-up dose (see later). The level should not be allowed to fall below 30 ppm since below this level there is a risk that algae and harmful bacteria will not be adequately controlled. The pool should not be maintained at the 30 ppm minimum level.

The frequency of required top-up doses will vary from pool to pool. Usually it is only necessary to add BAQUACIL once every two weeks.

The pH value should be maintained between 7.2 and 8.0. Add pH control chemicals to adjust as necessary. If the pH is maintained outside these limits, eye and skin irritation may develop and corrosion or scaling of equipment may occur.

Water balance is critical to bathers' comfort and successful pool maintenance with the use of BAQUACIL, as with any pool sanitizer. In addition to pH, total alkalinity and calcium hardness should be monitored and kept within the following recommended ranges:

Total alkalinity	80-150 ppm
Calcium hardness	200-275 ppm

PROBLEMS AND ADDITIONAL POOL OPERATION INFORMATION

Since numerous mechanical and chemical factors can affect pool water quality, problems, in general, are not uncommon regardless of the sanitizer employed. Should a problem arise in the routine use of BAQUACIL, consult the BAQUACIL Trouble-Shooting Guide or your local BAQUACIL retailer.

GENERAL CARE

Regular brushing and vacuuming of pools is essential to keep your pool in clean condition. Dust and debris allowed to accumulate in the pool consume chemicals and provide a nutrient source for algae and bacteria.

Filters should be kept clean according to the manufacturer's recommendations.

- Sand filters: a weekly backwash is recommended.
- Diatomaceous earth filters: regular replacement of the diatomaceous earth is recommended when the pressure gauge indicates clogging.
- Cartridge filters: should be cleaned weekly.

Chemical additions should be made either at the pool inlets or distributed around the edges of the pool for more rapid mixing. Filters should be running while chemical additions are being made and left on for at least an additional 8 hours.

WINTERIZING A POOL WITH BAQUACIL

When swimming has finished for the season, precautions must be taken to prevent frost damage to the pool and its accessories. We recommend that you seek the advice of your installer or service agent regarding this procedure.

The water can be easily maintained in good condition over the winter with BAQUACIL if the following procedures are carried out:

1. If the pool is hazy or infected with algae, these problems should be corrected prior to winterizing.
2. Vacuum and brush the pool thoroughly.
3. Backwash the filter before shutting it down.
4. Add BAQUACIL to bring the level up to at least 50 ppm.
5. Cover the pool to prevent dirt and leaves accumulating in the water.
6. Check the pool water once or twice over the winter and add BAQUACIL if necessary.

At the beginning of the next season, after brushing and vacuuming your pool and cleaning the filter, carry out the normal weekly checks given above. The pool is now ready for use.

How to Use the BAQUACIL Test Kit

The BAQUACIL level and pH value should be checked weekly during the swimming season and adjusted if necessary. The ideal values are 10 ppm BAQUACIL and pH 7.2-7.6. The kit which contains 2 vials will allow you to determine BAQUACIL level and pH.

METHOD - BAQUACIL LEVEL

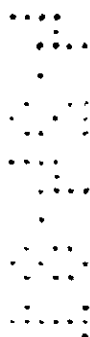
1. Fill cell chamber as right up to the black line with swimming pool water. Fill the other cell with tap water. Add five drops of Indicator Solution (black bottle) to each cell with fingers or heel of hand and invert three times to mix the solutions.
2. To the left cell containing tap water, add one drop of BAQUA-CHECK (standard blue bottle). Cover with hand and invert three times. One drop of BAQUA-CHECK produces a standard equal to 10 ppm of BAQUACIL.
3. Compare color of standard (left cell) with pool water cell. Compare the cells by viewing at arms length, preferably in a shady area looking away from the sun. If color matches, or if the standard is slightly darker, your pool contains about 10 ppm of BAQUACIL. If the right pool water cell is darker, repeat step 2. Each repeat increases the standard BAQUACIL concentration by 10 ppm.
4. When the color of the standard (left cell) is slightly darker than the pool water cell, the pool BAQUACIL concentration has been determined. It is equal to the number of BAQUA-CHECK drops added times 10 ppm (e.g. 3 drops x 10 ppm = 30 ppm).
5. To check your color match, add one more drop of BAQUA-CHECK to the left standard cell. If your decision on color match was correct, this addition will produce a darker color than the pool water cell. This check will also show when the BAQUACIL pool concentration is between 10 ppm standard increments (e.g. 35 ppm).
6. Immediately after determining the BAQUACIL concentration, clean the test kit by rinsing several times with water. Should the test kit become stained, clean with a detergent solution then rinse thoroughly to remove any traces of detergent. When not in use, keep the kit in the protective wallet.

If the test kit determination indicates pool BAQUACIL concentration is 40 ppm or less, add a top-up dose according to Table 3.

METHOD - pH

1. Fill the left hand cell to the black line with pool water.
2. Add 5 drops of phenol red pH indicator to the cell.
3. Cover cell with fingers or heel of hand and invert the cell 3 times. Compare color of the cell with the color standard chips in the test kit. Compare cells at arms length, preferably in a shady area looking away from the sun.
4. Immediately after determining the pH, rinse the test kit with water and replace in protective wallet.

If the test kit indicates water is too acidic (pH 7.2 or less), add 1/2 oz. of 3.5% sodium bicarbonate to raise pH. Follow instructions on label and retest the water in 24 hours.



Conversion to Chlorinating Chemicals

As previously emphasized, BAQUACIL is not compatible with chlorinating pool chemical products. Accidental addition of chlorine or chlorine release products to a BAQUACIL pool will cause cloudiness and depletion of BAQUACIL. Instructions are provided below for handling an accidental chlorination. While direct chlorination is one way to intentionally remove BAQUACIL from a pool, a better procedure is provided below that avoids the cloudiness problem. This procedure should be used if conversion to another sanitizer is desired.

ACCIDENTAL CHLORINATION OF A BAQUACIL TREATED POOL

Cloudiness and insoluble solids formed by accidental chlorination of a BAQUACIL treated pool can be removed by vacuuming floating solids to waste and continuous filtration. Close attention should be paid to filter pressure as rapid filter blockage may occur necessitating frequent back washings. Alternatively, the pool may be drained to a sanitary sewer and refilled with fresh water.

INTENTIONAL CONVERSION TO CHLORINATING SANITIZERS

1. With filter running, adjust pH if necessary to 6.8 to 7.0.
2. Add sufficient pool grade monopersulphate oxidant such as OXY-BRITE (Great Lakes Biochemical Co. Inc.) or FREE SHOCK (Thompson Hayward Chemical Co.) to give a level of 50 to 60 ppm (about 10-12 pounds per 25,000 gallons of pool water), sprinkle the monopersulphate around the sides of the pool being careful to avoid getting on skin or clothes. Observe handling precautions on product labels.
3. Continue to run filter for 48 hours and add no other chemicals, do not be alarmed if water turns green.
4. After 48 hours, test for BAQUACIL with the BAQUACIL Test Kit.
 - a) If the BAQUACIL level is not at zero, add 5 pounds more monopersulphate and continue to filter for up to 48 hours or until BAQUACIL test reading is zero.
5. If a zero BAQUACIL test reading is obtained:
 - a) Remove one gallon of pool water in a bucket.
 - b) Dissolve 1 1/2 ounces of your chlorinating sanitizer in one pint of tap water.
 - c) Add this pint to the bucket of pool water.There should be no heavy precipitate.
 - a) If so, repeat steps 4a to 5c.
 - b) If not, adjust pool pH to 7.2 to 7.4 and add chlorine to product amounting to label directions.
6. Continue filtration until pool is clear.
7. It is a good idea to have your local pool store analyze a sample of your water to make sure the stabilizer level and water balance are in correct ranges.

NOTICE TO BUYER AND USER: Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with directions and proper methods of use. This warranty does not extend to the use of this product contrary to label instructions or under abnormal use conditions or under conditions not reasonably foreseeable to Seller, and Buyer and User assume the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY. Seller shall not be liable for consequential, special or indirect damages resulting from the use or handling of this product and Seller's sole liability and Buyer's and User's exclusive remedy shall be limited to the refund of the purchase price.

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