

# Chlorine+ *eXact*® Z

ADVANCED PHOTOMETER SYSTEM

DIGITAL ACCURACY FOR RELIABLE WATER CARE



Certified to  
NSF/ANSI Standard 50

**DIGITAL**  
**WATER TESTING**  
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## WELCOME.

Thank you for your Chlorine+ eXact® EZ purchase! This guide will quickly walk you through the technical details of your new photometer. After initial set-up, test procedures, and tips, you will be on your way to digital water testing! Each test will require the use of one or more of the testing methods outlined in this manual.

## YOUR CHLORINE+ EXACT® EZ COMES WITH:

- Cleaning Brush
- Quick Start Guide (this booklet)
- Acrylic Calibration Key (see [page 22](#))
- 42 foil packet strips (6 of each): Free Chlorine, Total Chlorine, pH, Total Chlorine High, Glycine, Peracetic Acid, and Peroxide

Note: The Chlorine+ eXact® EZ Starter Kits include eXact® Strip/Reagent bottles with 25 tests each (reagents vary with each kit) and not individual foil packets listed above.

## WHAT YOU WILL NEED TO GET STARTED:

- Four (4) AAA Alkaline batteries
- #4 Phillips head screwdriver

*Note:* This system has been calibrated for use with only our eXact® Micro reagents.

**YOUR NEW CHLORINE+ EXACT® EZ PHOTOMETER IS IDEAL FOR TESTING AND MAINTAINING YOUR DRINKING WATER, SANITIZING & DISINFECTING SOLUTIONS, FOOD PROCESS WATER, AND MORE!**

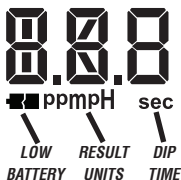
### SAMPLE CELL - 4 ML

Built-in plastic 4mL cell for collecting your water sample

### LIGHT SOURCE

Uses 525nm wavelength and 11mm path-length for testing

### PHOTOMETER LCD



### LCD

Displays results and test name

READ

### READ BUTTON

Starts test timer

MENU

### MENU BUTTON

Cycles through available tests

ZERO/ON

### ZERO/ON BUTTON

Turns the meter on and creates a baseline for your water testing

### BASE

Install/replace batteries here (IP67 rated waterproof)

### CELL COVER

Covers the cell for mixing and bright light situations

### waterproof IP67

Protected against the effects of immersion in water to depth between 15cm and 1m



Part no. **486205**

### INSTALL "AAA" BATTERIES (NOT INCLUDED)

1. Use a #4 Phillips head screwdriver to remove the screw from the base of your Chlorine+ eXact® EZ.
2. Remove the base.
3. Install Four (4) new AAA batteries as illustrated inside your photometer's battery compartment. We recommend using high quality batteries.
4. Replace the base firmly with pressure while tightening the screw. The meter will turn on automatically.
5. Tighten the screw with #4 Phillips head screwdriver.

**Be sure not to over tighten.**



### SCREW

Unscrew to remove base

## FILL, DIP, READ TOTAL BROMINE

4

1

### POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Chlorine+ eXact® EZ.

2

### FILL CELL

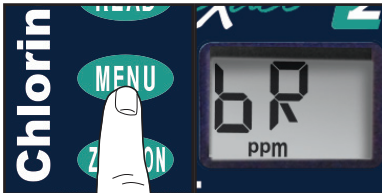
Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

### SELECT TEST

Press and re-press the **MENU** button until the display shows bR.



4

### CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0.00PPM, indicating the meter is ready for testing.



**5**

## REMOVE STRIP

Remove one eXact® Strip Micro bR, Part #486644 and set in a dry, convenient place. Replace cap on bottle.



**6**

## DIP STRIP

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Do not spill the sample from the CELL. Remove and discard the strip. See [page 23](#) for important tips.



DPD will stain the CELL wall if allowed to remain in the cell. To remove staining, rinse cell thoroughly and fill with water then add two (2) drops of bleach (5-8%) and clean with brush until stain is removed. Caution: Avoid contact of bleach with eyes and clothing.

**7**

## CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as Total Bromine. This result is automatically stored in the bR menu. After testing is complete, rinse the sample cell immediately and clean with brush to remove reagents which coat the CELL wall.



## FILL, DIP, READ CHLORINE DIOXIDE

1

### POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Chlorine+ eXact® EZ.

2

### FILL CELL

Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

### SELECT TEST

Press and re-press the **MENU** button until the display shows Cd.



4

### REMOVE STRIPS

Remove one eXact® Strip Micro Glycine, Part #484014 and one eXact® Strip Micro Cd, Part #486633 and set in a dry, convenient place. Replace caps on bottles.



5

## DIP STRIP

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip Glycine in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Remove and discard the strip. Place the Cell Cover onto the CELL.



6

## AUTO-ZERO

The meter will automatically ZERO and the display will read 0.00PPM. Get ready to dip eXact® Strip Cd.



7

## DIP STRIP

The meter will automatically initiate a 20 second countdown. **DIP** the eXact® strip Cd in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Do not spill the sample from the CELL. Remove and discard the strip. The display will automatically start to count up for 100 seconds.



DPD will stain the CELL wall if allowed to remain in the cell. To remove staining, rinse cell thoroughly and fill with water then add two (2) drops of bleach (5-8%) and clean with brush until stain is removed. Caution: Avoid contact of bleach with eyes and clothing.

8

## CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as Chlorine Dioxide. This result is automatically stored in the Cd menu. After testing is complete, rinse the sample cell immediately and clean with brush to remove reagents which coat the CELL wall.



## FILL, DIP, READ FREE CHLORINE

1

### POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Chlorine+ eXact® EZ.

2

### FILL CELL

Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

### SELECT TEST

Press and re-press the **MENU** button until the display shows CL.



4

### CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0.00PPM, indicating the meter is ready for testing.





**5**

## **REMOVE STRIP**

Remove one eXact® Strip Micro CL (DPD-1), Part #486637 and set in a dry, convenient place. Replace cap on bottle.



**6**

## **DIP STRIP**

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Do not spill the sample from the CELL. Remove and discard the strip.



DPD will stain the CELL wall if allowed to remain in the cell. To remove staining, rinse cell thoroughly and fill with water then add two (2) drops of bleach (5-8%) and clean with brush until stain is removed. Caution: Avoid contact of bleach with eyes and clothing.

**7**

## **CAP CELL AND READ RESULTS**

Place the Cell Cover onto the CELL and **READ** result displayed as Free Chlorine. If result is **6.0** or greater, repeat steps 5-7 using same sample and a fresh strip. This result is automatically stored in the CL menu. After testing is complete, rinse the sample cell immediately and clean with brush to remove reagents which coat the CELL wall.



## FILL, DIP, READ

### TOTAL CHLORINE HIGH

10

1

#### POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Chlorine+ eXact® EZ.

2

#### FILL CELL

Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

#### SELECT TEST

Press and re-press the **MENU** button until the display shows CLH.



4

#### CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0.0PPM, indicating the meter is ready for testing.



5

## REMOVE STRIP

Remove one eXact® Strip Micro CLH, Part #486672 and set in a dry, convenient place. Replace cap on bottle.



6

## DIP STRIP

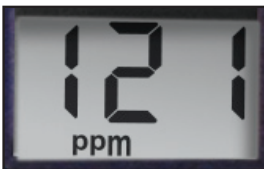
Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Remove and discard the strip. The display will automatically start to count up for 120 seconds. See [page 23](#) for important tips.



7

## CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as Total Chlorine. This result is automatically stored in the CLH menu. After testing is complete, rinse the sample cell immediately and clean with brush to remove reagents which coat the CELL wall.



## FILL, DIP, READ HYDROGEN PEROXIDE

12

1

### POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Chlorine+ eXact® EZ.

2

### FILL CELL

Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

### SELECT TEST

Press and re-press the **MENU** button until the display shows HP.



4

### CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0.0PPM, indicating the meter is ready for testing.



**5**

## REMOVE STRIP

Remove one eXact® Strip Micro HP, Part #486648 and set in a dry, convenient place. Replace cap on bottle.



**6**

## DIP STRIP

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Remove and discard the strip. The display will automatically start to count up for 100 seconds.



If sample temperature is less than 42°F, allow sample to reach room temperature before testing. Another option is to ignore the result on the display and press **READ** again to start another 20 second countdown/100 second count-up. The extra reaction time is needed in cold samples.

**7**

## CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as Hydrogen Peroxide. This result is automatically stored in the HP menu. After testing is complete, rinse the sample cell immediately and clean with brush to remove reagents which coat the CELL wall.



## FILL, DIP, READ OZONE

14

1

### POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Chlorine+ eXact® EZ.

2

### FILL CELL

Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

### SELECT TEST

Press and re-press the **MENU** button until the display shows O3.



4

### CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0.00PPM, indicating the meter is ready for testing.



**5**

**REMOVE STRIP**

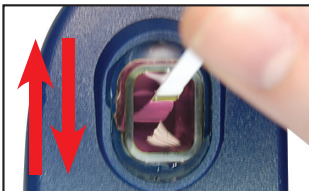
Remove one eXact® Strip Micro O3, Part #486634 and set in a dry, convenient place. Replace cap on bottle.



**6**

**DIP STRIP**

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Do not spill the sample from the CELL. Remove and discard the strip. See [page 23](#) for important tips.

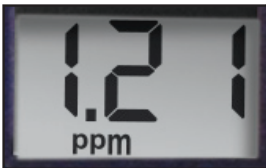


DPD will stain the CELL wall if allowed to remain in the cell. To remove staining, rinse cell thoroughly and fill with water then add two (2) drops of bleach (5-8%) and clean with brush until stain is removed. Caution: Avoid contact of bleach with eyes and clothing.

**7**

**CAP CELL AND READ RESULTS**

Place the Cell Cover onto the CELL and **READ** result displayed as Ozone. This result is automatically stored in the O3 menu. After testing is complete, rinse the sample cell immediately and clean with brush to remove reagents which coat the CELL wall.



Do not empty cell if Chlorine or Bromine may be present in the sample. Instead, press **READ** again and simultaneously **DIP** a Glycine strip into the reacted sample from step 7. Take this second result and subtract it from the first result (obtained in step 7 above). This new value is your Ozone result.

**For a more detailed procedure, visit [sensafe.com/exact-ez-chlorine-plus](http://sensafe.com/exact-ez-chlorine-plus).**

**NOTE:** This test has no interferences from Peroxide, Iron, or Copper.

1

## POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Chlorine+ eXact® EZ.

2

## FILL CELL

Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

## SELECT TEST

Press and re-press the **MENU** button until the display shows PA.



4

## CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0<sup>PPM</sup>, indicating the meter is ready for testing.





5

## REMOVE STRIP

Remove one eXact® Strip Micro PA, Part #486675 and set in a dry, convenient place. Replace cap on bottle.



6

## DIP STRIP

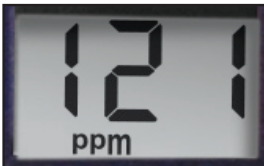
Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Remove and discard the strip. See [page 23](#) for important tips.



7

## CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as Peracetic Acid. This result is automatically stored in the PA menu. After testing is complete, rinse the sample cell immediately and clean with brush to remove reagents which coat the CELL wall.



## FILL, DIP, READ PH

18

Requires water sample with a Total Alkalinity minimum of 20ppm.

1

### POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Chlorine+ eXact® EZ.

2

### FILL CELL

Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

### SELECT TEST

Press and re-press the **MENU** button until the display shows PH.



4

### CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0.00<sub>pH</sub>, indicating the meter is ready for testing.



5

## REMOVE STRIP

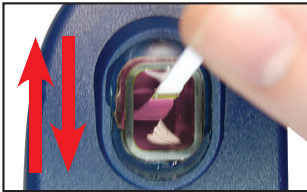
Remove one eXact® Strip Micro PH, Part #486639-II and set in a dry, convenient place. Replace cap on bottle.



6

## DIP STRIP

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Do not spill the sample from the CELL. Remove and discard the strip.



7

## CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as pH. This result is automatically stored in the PH menu. After testing is complete, rinse the sample cell immediately and clean with brush to remove reagents which coat the CELL wall.



## FILL, DIP, READ TOTAL CHLORINE

1

### POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Chlorine+ eXact® EZ.

2

### FILL CELL

Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

### SELECT TEST

Press and re-press the **MENU** button until the display shows TC.



4

### CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0.00PPM, indicating the meter is ready for testing.



**5**

**REMOVE STRIP**

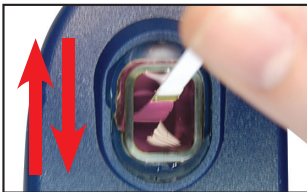
Remove one eXact® Strip Micro CL (DPD-4), Part #486670 and set in a dry, convenient place. Replace cap on bottle.



**6**

**DIP STRIP AND PRESS READ**

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Do not spill the sample from the CELL. Remove and discard the strip. The display will automatically start to count up for 120 seconds. **NOTE:** Standard Method (4500-Cl G, procedure for total chlorine) requires the reading to be made after 2 minutes from the time the KI is added.



DPD will stain the CELL wall if allowed to remain in the cell. To remove staining, rinse cell thoroughly and fill with water then add two (2) drops of bleach (5-8%) and clean with brush until stain is removed. Caution: Avoid contact of bleach with eyes and clothing.

**7**

**CAP CELL AND READ RESULTS**

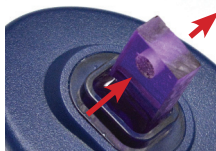
Place the Cell Cover onto the CELL and **READ** result displayed as Total Chlorine. If result is **6.0** or greater, repeat steps 5-7 using same sample and a fresh strip. This result is automatically stored in the TC menu. After testing is complete, rinse the sample cell immediately and clean with brush to remove reagents which coat the CELL wall.



The Acrylic Calibration Key is a tool for verifying the calibration of your Chlorine+ eXact® EZ Photometer compared to its original factory settings. Run this test immediately upon receipt and record value for future reference. Follow steps 1-4 on page 8 (do not use cap during ZERO). Then, follow the remaining steps below.

## 5 **DIP KEY AND PRESS READ**

Place the Acrylic Calibration Key into the water sample in the center of the CELL. Be sure the key is positioned upright (vertical) and to the bottom of the CELL. Press READ



## 6 **READ RESULT & RECORD**

Result is displayed on the Chlorine+ eXact® EZ. Record value below. For additional tests, repeat steps 5-6.

Expect the result to be within 0.15 units from previous calibration. If variation is greater, please re-check your ZERO procedure (steps 3-4) and be sure to use clean water (deionized or distilled if necessary).



### **Acrylic Calibration Key** Records:

<b>Date Tested</b>	<b>Recorded Value</b>	<b>Comments</b>

---

The Chlorine+ eXact® EZ photometer has a 5 minute auto-shutoff timer.

---

For best results, use the cell cover when zeroing and reading samples.

---

Before testing, rinse the meter sample cell with the sample water 3 times.

---

Always fill the cell to capacity (4mL); be careful not to splash liquid over the side.

---

Test immediately after filling the cell with the water sample.

---

Due to the strip slitting process, you may find one or two strips that are noticeably smaller or larger in width than the normal strips in the bottle.

**These should be discarded.** Using these strips may give unreliable results.

---

When testing pH, it is recommended to run the pH test prior to running Chlorine. If you choose to run the pH after Chlorine, ensure you thoroughly clean the cell with water and the brush provided.

---

Meter is not compatible for use with powder pillows, tablets, or liquids from other manufacturers.

---

Dip strip for entire countdown.

---

Even if all pads are not immersed in water, **DO NOT BEND THE STRIP**. Make sure the strip touches the bottom of the CELL while dipping the strip for 20 seconds.

---

Each eXact® Strip Micro is valid for ONLY one test. Discard strip after use.

---

Dry the outside of the meter and inside the mixing cap before storage to prevent corrosion.

---

Remove batteries before storing for prolonged periods.

---

Store the meter and test materials out of direct sunlight and away from chemical storage areas.

---

Minimize exposure of meter and test reagents to heat above 80°F (27°C).

---

When installing batteries, verify the O-ring is still attached to the screw before tightening.

---

If water temperature is above 95°F/35°C, press READ when the timer displays "10" for Total Bromine, Free Chlorine, Total Chlorine, and pH tests.

---

Cleaning the cell with water and brush after each test is recommended for best accuracy and prior to storage of unit.

---

Each test menu can store 20 results. To retrieve the stored results, go to the desired test using the MENU key. When the desired test is displayed, press and hold down the MENU key. Continue holding down the MENU key to scroll the stored results for that test, starting with the most recent result. The meter will display, from memory, the last 20 readings in sequence beginning with -20, which is the latest result, followed by -19, which is the 2nd latest result, etc; and finally -01, which is the oldest result retained. Only the last 20 readings are stored in each menu. This meter is able to store 100 results in memory (20 in each menu).

## 24 TROUBLESHOOTING/INTERFERENCES

Listed below are possible situations that may arise while testing. Please contact one of our knowledgeable customer service representatives if you require further assistance.

Subject	Cause	Solution
Dim screen or no response from meter	Low battery	Replace batteries
"LO" on LCD while zeroing	Low battery	Replace batteries
	Dirty cell	Clean cell
	Cloudy sample	Dilute sample or use filter
	Bad LED	Contact ITS
"HI" on LCD while reading	Result above detection level	Re-run test to verify result
"LO" on LCD while reading	Result below detection level	Re-run test to verify result

### eExact® Strip Micro CL (DPD-1, DPD-3, DPD-4) Interferences

Interferant	Interfering Levels & Treatments
Acidity	If sample has acidity above 150mg/L CaCO <sub>3</sub> test may not develop full color. Neutralize to pH 6.0 to 7.0 with 0.5N Sodium hydroxide.
Alkalinity	If sample has alkalinity above 200mg/L CaCO <sub>3</sub> test may not develop full color. Neutralize to pH 6.0 to 7.0 with 0.5N Sulfuric acid.
Bromine & Bromamines, Br <sub>2</sub>	Color similar to other oxidizer reaction at all levels.
Chlorine, Cl <sub>2</sub>	Color similar to other oxidizer reaction at all levels.
Chlorine Dioxide, ClO <sub>2</sub>	Color similar to other oxidizer reaction at all levels.
Copper, Cu <sup>+2</sup>	Color development is reduced above 10 ppm (mg/L).
Iodine, I <sub>2</sub>	Color similar to other oxidizer reaction at all levels.
Manganese (Mn <sup>+4</sup> , Mn <sup>+6</sup> ); Chromium (Cr <sup>+6</sup> )	See AWWA procedure 4500-CL F, 1(d) for removal of interferences.
Monochloramines (NH <sub>2</sub> Cl) (applies to DPD-1 only)	Monochloramine interferences are known to occur in free chlorine DPD methods. This interference is dependent on temperature and monochloramine concentration.
Ozone, O <sub>3</sub>	Color similar to other oxidizer reaction at all levels.
Peroxides	Interference is possible.
pH	Typical pH samples of potable water with a pH of 6.0 to 9.0 are OK. If outside this range adjust to pH 6.0 to 7.0 using acid (0.5N Sulfuric acid) or base (0.5N Sodium hydroxide).



## BUILT IN SAMPLE CELL

The built-in sample cell is made of transparent plastic; the sturdy cell design will last for over 20,000 readings. Our studies have shown that scratches on the cell will not compromise the accuracy of your results because of the cell's fixed position.

## WARRANTY (2 YEARS)

*Registration of your eXact® photometer must be received within 30 days from date of purchase to activate the warranty. Registration is available over the phone (+1-803-329-9712 Ext. 0) or online at [sensafe.com/product-registration](https://sensafe.com/product-registration) (Personal data is kept confidential). The eXact® photometer is warranted to be free from defects in materials and workmanship for a period of two (2) years from the date of purchase by the customer. ITS will repair or replace, at its discretion, product which is deemed to be faulty due to manufacturing defect. Warranty does not cover product damage caused by abuse (such as crushing a tablet in the cell), battery corrosion damage, or improper use. If the meter is faulty or otherwise defective contact ITS by phone (+1-803-329-9712 Ext. 0) or email ([its@sensafe.com](mailto:its@sensafe.com)) to describe the problem and obtain a return authorization form before returning the photometer to ITS. Damage caused by improper packing of the photometer for return shipment to ITS will not be covered by the warranty. Customer is responsible for shipping charges to ITS. ITS pays postage when photometer is returned to customer. A maximum processing fee of \$75 will be charged for repair or replacement of non-registered photometers and damages not covered by this warranty. The repair or replacement of the photometer will not extend or renew the period of guarantee. This warranty does not affect your statutory rights. The warranty is not transferable.*

## CHLORINE+ EXACT® EZ ACCURACY

All tests have been calibrated using certified reference standards and analytical spectrophotometric methods. The Chlorine+ eXact® EZ has been factory calibrated and will stay valid because of its exceptional quality. We are so confident in the Chlorine+ eXact® EZ, we offer an industry leading 2-year warranty.

We built the Chlorine+ eXact® EZ to be easy, accurate and environmentally friendly. We have achieved this by utilizing our patented eXact® Strip Micro Technology, which uses 60% less water and chemistry than alternative methods. Instead of using a 10mL water sample, eXact® Strip Micro uses a 4mL water sample. The accuracy of the meter is maintained by designing the sample cell with an 11mm path-length.

**METHOD VERIFICATION**

Ready Snap® 3 is a calibration verification solution with predetermined color to verify the accuracy of your Chlorine+ eXact® EZ photometer.

The easy 3 step procedure (snap, fill, and test) allows for quick verification of test parameters. Each box contains 10 ampoules of 10mL solution with no dilution necessary.



For Ready Snap® 3 values, visit us online at [sensafe.com/exact-ez-chlorine-plus/](https://sensafe.com/exact-ez-chlorine-plus/)

**COMPLIANCE TESTING**

This DPD test system for Chlorine and Chlorine Dioxide are accepted for reporting by most health departments because the tests are USEPA (DIN Standard 38 408 G4/G5, ISO 7393/2) accepted for testing requirements for Free Chlorine, Total Chlorine, and Chlorine Dioxide.



The compliance requirement is a photometer wavelength to measure between 490 and 530nm. The Chlorine+ eXact® EZ smart photometer uses a 525nm wavelength and 11 mm path-length. The eXact® Strip Micro CL/Cd (DPD-1) use the same reagents and proportions, and the resulting solution pH is maintained between 6.2 and 6.5 as specified by AWWA method 4500-Cl G/CIO<sub>2</sub>-D. The USEPA does not “approve” commercial DPD delivery systems. The eXact® Strip Micro CL (DPD-1) for **Free Chlorine**, the eXact® Strip Micro CL (DPD-4) for **Total Chlorine**, and the eXact® Strip Micro Cd (DPD-1) for **Chlorine Dioxide** meet your reportable testing requirements because the eXact® Strip Micro strips deliver the same chemicals in identical proportions. Consult with your local health department for official regulations.

<b>COMPONENT (FREE CHLORINE)</b>	<b>AWWA 4500-CL G</b>	<b>CHLORINE+ EXACT® EZ</b>
Anhydrous DPD sulfate	1.5%	1.5%
Anhydrous Na <sub>2</sub> HPO <sub>4</sub>	33.4%	33.4%
Anhydrous KH <sub>2</sub> PO <sub>4</sub> Na <sub>2</sub>	64.0%	64.0%
EDTA	1.1%	1.1%

The Model Aquatic Health Code (MAHC) is a set of guidelines published by the Centers for Disease Control and Prevention (CDC). This document brings together the latest knowledge based on science and best practices to help state and local government officials develop and update pool codes. They may use the code in whole, choose to use parts, or modify to fit their needs. Use of the MAHC is intended to save time and resources spent individually developing and updating codes across the country, while giving agencies the benefit of the latest science and best practices to help keep pools fun, safe, and healthy.



Certified to  
NSF/ANSI Standard 50

The MAHC requires NSF/ANSI 50 certification of water quality testing devices (WQTD) used in recreational facilities such as public swimming pools, interactive fountains, and Water parks. Third-party certification to NSF/ANSI 50 allows manufacturers to make verified claims regarding the performance, accuracy and operating range of their WQTD. The performance testing of a WQTD involves accuracy and repeatability testing on two different lots of new production. Unlike most NSF/ANSI 50 certifications, WQTDs require follow-up testing of the product at the end of the manufacturer's specified shelf life. Certified products are given an accuracy rating to one of three levels: L1, L2 or L3, with L1 being the highest accuracy rating.

TEST	RANGE	ACCURACY RATING
<b>PARAMETERS</b>		
Total Bromine	0 - 17 ppm	L1
Free Chlorine	0 - 12 ppm	L1
pH	6.4 - 8.4 pH	L1

## TECHNICAL SUPPORT

Please visit [sensafe.com/exact-ez-chlorine-plus/](https://sensafe.com/exact-ez-chlorine-plus/) for the latest technical information and how-to-videos. For additional technical support, call (803) 329-9712.

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Manufacturing quality products since 1989

# Chlorine<sup>+</sup> *exact*<sup>®</sup> **E**

## ADVANCED PHOTOMETER SYSTEM

NSF Certified Tests

### EXACT<sup>®</sup> MICRO TESTS & REAGENTS

PARAMETER / TEST	PART #	RANGE ppm	% BEST <sup>†</sup> ACCURACY	# OF TESTS
<b>Bromine, Total (DPD-4)</b>	<b>486644</b>	<b>0.00 – 17.0</b>	<b>NSF-50 L1</b>	<b>100</b>
Chlorine Dioxide (DPD-1)	486633	0.00 – 6.0	5	100
<b>Chlorine, Free (DPD-1)<sup>†</sup></b>	<b>486637</b>	<b>0.00 – 12.0</b>	<b>NSF-50 L1</b>	<b>100</b>
Chlorine, Total (DPD-4) <sup>†</sup>	486670	0.00 – 12.0	5	100
Chlorine, Total High	486672	1.0 – 200	5	50
Hydrogen Peroxide	486648	1 – 100	5	50
Ozone (DPD-4)	486634	0.00 – 2.00	10	100
Peracetic Acid (PAA)	486675	2 – 400	5	100
<b>pH</b>	<b>486639-II</b>	<b>6.4 – 8.4 pH</b>	<b>NSF-50 L1</b>	<b>100</b>

<sup>†</sup> Value provided represents best possible accuracy under laboratory conditions, but may vary throughout the detection range. For a complete list of accuracies throughout all ranges, please visit [sensafe.com/exact-ez-chlorine-plus/](http://sensafe.com/exact-ez-chlorine-plus/).

<sup>†</sup> Requires the use of 2 strips if reading is above 6 ppm.

### PATENT INFORMATION

US Patent #7,333,194; Euro Pat. No. 1 725 864 DE FR UK; South Africa Pat. No. 2007/0628 by Industrial Test Systems, Inc., 1875 Langston Street, Rock Hill, SC USA.

EXACT<sup>®</sup> is a registered trademark of Industrial Test Systems, Inc. Rock Hill, SC USA.

Visit us online: [sensafe.com/exact-ez-chlorine-plus/](http://sensafe.com/exact-ez-chlorine-plus/)  
for up-to-date product information.



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**Industrial Test Systems, Inc.**

Innovators of Water Quality Testing