Taylor's 2000 Series Test Kits

INTRODUCTION

The 2000 Series[™] was designed to permit users to **build up their test kits in a stepwise fashion** as their testing needs grow without having to purchase duplicate components.

Reagent packs containing just what's needed to upgrade each kit are sold for this purpose.

The family of products includes the Starter[™], Test 4[™], Complete[™], Service Complete[™], and California Regulatory[™] models. For a complete description of each kit, see below.

Thanks to this upgrade system, a buyer can begin with the fundamentals in the Starter kit and build his way to a comprehensive testing tool called, appropriately enough, the Complete kit. Options in the 2000 Series include high- or low-range sanitizer values and .75 oz. or 2 oz. reagent bottles, and kits for non-English-speaking users.

All cases in the 2000 Series are molded of sea-blue polypropylene and designed to withstand the rigors of several seasons' worth of testing. Ridges on the edges will appeal to retailers who wish to stack the kits for display. Standard-size cases holding .75 oz. reagents fit easily in the palm of your hand; service-size cases holding 2 oz. bottles feature handles for easy transport.

The heart of any test kit is the comparator block, used for obtaining the water sample, mixing the reagents, and matching colors. Ours are the finest available. Note the new tabbed caps which are easier to remove; raised fill marks to help ensure proper test volumes; frosted backing for accurate readings; and dilution guides that make dealing with unusually high concentrations a breeze.

Several of the kits in this series feature **FAS-DPD drop tests**, which can measure free and combined chlorine



Testing with a Complete kit will answer how much sanitizer to add, when and how much to shock treat, and what adjustments are needed in the water's chemistry to prevent corrosion and scaling conditions.

directly as low as 0.2 ppm. The reading is made by noting a distinct change from vibrant pink to colorless in the treated water sample. This method is also beneficial when testing samples with high levels of sanitizer because there is no need to interpret close shades of pink—and a boon for colorblind users too.

All kits include a copy of *Pool & Spa Water Chemistry: A Testing & Treatment Guide*. Written by experts in water chemistry, this 60-page booklet contains information about sanitation and water balance, as well as **tables for water treatment**.

Top-notch chemistry and easy-tofollow instructions make the 2000 Series the perfect choice for service technicians, public and semi-public pool operators, environmental health specialists, and do-it-yourself consumers.

Inquire about the availability of multipacks.

2000 SERIES

*Available in English, Spanish, French, German.

K-2000*

Starter-high: DPD chlorine .5-5 ppm & DPD bromine 1-10 ppm, pH 7.0-8.0, acid & base demand; .75 oz. bottles

K-2100*

Starter-low: DPD chlorine .25-2.5 ppm & DPD bromine .5-5 ppm, pH 7.0-8.0, acid & base demand; .75 oz. bottles

K-2015*

Test 4-high: DPD chlorine .5-5 ppm & DPD bromine 1-10 ppm, pH 7.0-8.0, acid & base demand, total alkalinity; .75 oz. bottles

K-2115*

Test 4-low: DPD chlorine .25-2.5 ppm & DPD bromine .5-5 ppm, pH 7.0-8.0, acid & base demand, total alkalinity; .75 oz. bottles

K-2005*

Complete-high: DPD chlorine .5-5 ppm & DPD bromine 1-10 ppm, pH 7.0-8.0, acid & base demand, total alkalinity, calcium hardness, cyanuric acid; .75 oz. bottles



K-2105*

Complete-low: DPD chlorine .25-2.5 ppm & DPD bromine .5-5 ppm, pH 7.0-8.0, acid & base demand, total alkalinity, calcium hardness, cyanuric acid; .75 oz. bottles

K-2006

Complete with FAS-DPD Chlorine:

FAS-DPD chlorine 1 drop = 0.2 or 0.5ppm, pH 7.0-8.0, acid & base demand, total alkalinity, calcium hardness, cyanuric acid; .75 oz. bottles

K-2106

Complete with FAS-DPD Bromine:

FAS-DPD bromine 1 drop = 0.5 or 1.25 ppm, pH 7.0-8.0, acid & base demand, total alkalinity, calcium hardness; .75 oz. bottles

K-2005C*

Service Complete-high: DPD chlorine .5-5 ppm & DPD bromine 1-10 ppm, pH 7.0-8.0, acid & base demand, total alkalinity, calcium hardness, cyanuric acid; 2 oz. bottles

K-2105C*

Service Complete-low: DPD chlorine .25-2.5 ppm & DPD bromine .5-5 ppm, pH 7.0-8.0, acid & base demand, total alkalinity, calcium hardness, cyanuric acid; 2 oz. bottles

Service Complete with FAS-DPD **Chlorine**: FAS-DPD chlorine 1 drop = 0.2 or 0.5 ppm, pH 7.0-8.0, acid & base demand, total alkalinity, calcium hardness, cyanuric acid; 2 oz. bottles

K-2007

California Regulatory: DPD chlorine .5-5 ppm & DPD bromine 1-10 ppm, pH 7.0-8.0, extra cyanuric acid; .75 oz. bottles

California Regulatory with FAS-DPD Chlorine: FAS-DPD chlorine 1 drop = 0.2 or 0.5 ppm, pH 7.0-8.0,extra cyanuric acid; .75 oz. bottles

USER BENEFITS

- Reagents dispense completely—no waiting for tablets to dissolve.
- Printed-color standards, sealed in plastic for protection against water, chemicals, and scratches, provide reliable color matches.
- Waterproof instructions are printed on plastic-impregnated paper that resists fading and tearing.
- Custom-molded, durable plastic cases provide **safe storage** for all tests.
- Proven chemistries are based on Standard Methods for the Examination of Water and Wastewater, APHA, Washington, DC, and/or American Society for Testing and Materials, ASTM, Philadelphia, PA. Some methods use proprietary chemistry developed by Taylor Technologies.

ALSO AVAILABLE

- Reagent packs for upgrading Starter and Test 4 kits to Complete kit status, and for replenishing all tests in the 2000 Series.
- Monopersulfate kit (K-1518) to measure both free and combined chlorine accurately in the presence of potassium monopersulfate (nonchlorine) shock treatment, using FAS-DPD.
- Stand-alone FAS-DPD drop tests: the K-1515-A and -C measure both free and combined chlorine at increments as low as 0.2 ppm; the K-1517-A and -C measure total bromine as low as 0.5 ppm.
- The Professional Series[™], with liquid-color standards in either Slide™ or Midget[™] comparators and an attractive attaché-style case.
- Water Analysis Center (K-0202), a complete testing laboratory with five Slide comparators.
- Counterlab Rx $1^{\text{\tiny TM}}$ (K-0203), a 21-3/4" wide x 8" high x 8" deep lab perfect for retailers with limited counter space.
- The Countertop Chemist[™], a Windows®-based water analysis program.
- Toll-free technical assistance.

Authorized Distributor www.clarksonlab.com

Representative Test Procedure Reproduced from K-2005 instruction:

POOL & SPA WATER TESTS Chlorine (Free, Combined, Total) Test

Keep test kit out of reach of children4. Replace solutions once each year.
 Read precautions on all labels.
 S. Do not dispose of solutions in pool 3. Store test kit in cool, dark place.
 6. Rinse tubes before and after each

- 1. Rinse and fill small comparator tube to 9 mL mark with water to be tested. 2. Add 5 drops R-0001 and 5 drops R-0002. Cap and invert to mix.
- 3. Match color with color standard.* Record as parts per million (ppm) free chlorine (FC).
- 4. Add 5 drops R-0003. Cap and invert to mix.
- 5. Match color immediately. Record as ppm total chlorine (TC)
- 6. Subtract FC from TC. Record as ppm combined chlorine (CC). Formula: TC FC = CC. **Total Bromine Test**
- 1. Rinse and fill small comparator tube to 9 mL mark with water to be tested.
- 2. Add 5 drops R-0001 and 5 drops R-0002. Cap and invert to mix.
- 3. Match color with color standard. * Record as parts per million (ppm) total bromine.
- * If color is off-scale: Repeat test using 4.5 mL sample diluted to 9 mL mark with tap water. Multiply reading by 2 to obtain approximate sanitizer level. If color is still off-scale: Repeat test using 1.8 mL sample diluted to 9 mL mark with tap water. Multiply reading by 5 to obtain approximate sanitizer level.

pH Test

- 1. Rinse and fill large comparator tube to 44 mL mark with water to be tested.
- 2. Add 5 drops R-0004. Cap and invert to mix.
- 3.Match color with color standard. Record as pH units and save sample if pH needs adjustment. If sample color is between two values, pH is average of the two. To LOWER pH: See acid demand test. To RAISE pH: See base demand test.

Acid Demand Test

- 1. Use treated sample from pH test.
- 2. Add R-0005 dropwise. After each drop, count, mix, and compare with color standards until desired pH is matched. See treatment tables to continue.

Base Demand Test

- 1. Use treated sample from pH test.
- 2. Add R-0006 dropwise. After each drop, count, mix, and compare with color standards until desired pH is matched. See treatment tables to continue.

5. Do not dispose of solutions in pool or spa. 8. Hold bottle vertically when dispensing. 6. Rinse tubes before and after each test. Total Alkalinity Test

- 1. Rinse and fill large comparator tube to 25 mL mark with water to be tested.*
- 2. Add 2 drops R-0007. Swirl to mix.
- 3. Add 5 drops R-0008. Swirl to mix. Sample should turn green.
- 4. Add R-0009 dropwise. After each drop, count and swirl to mix until color changes from green to red.
- 5. Multiply drops in Step 4 by 10. Record as parts per million (ppm) total alkalinity as calcium carbonate.
- When high TA is anticipated, this procedure may be used: Use 10 mL sample, 1 drop R-0007, 3 drops R-0008, and multiply drops in Step 4 by 25.

Calcium Hardness Test

- 1. Rinse and fill large comparator tube to 25 mL mark with water to be tested.*
- 2. Add 20 drops R-0010. Swirl to mix.
 3. Add 5 drops R-0011L. Swirl to mix. If calcium hardness is present, sample will turn red. 4. Add R-0012 dropwise. After each drop, count and swirl to mix until color changes from
- 5. Multiply drops in Step 4 by 10. Record as parts per million (ppm) calcium hardness as calcium carbonate.
- * When high CH is anticipated, this procedure may be used: Use 10 mL sample, 10 drops R-0010, 3 drops R-0011L, and multiply drops in Step 4 by 25.

Cyanuric Acid Test

- 1. Rinse and fill CYA dispensing bottle (#9191) to 7 mL mark with water to be tested.
- 2. Add R-0013 to 14 mL mark. Cap and mix for 30 seconds.
- 3. Slowly transfer cloudy solution to small comparator tube until black dot on bottom just disappears when viewed from top.
- 4. Read tube at liquid level on back of comparator block. Record reading as parts per million (ppm) cvanuric acid.

8/00

Instr. #5121