



Water Talk

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The Cornerstone – A helpful resource published by Taylor Technologies, Inc.

Many water treaters have grown up in this business using the test kits and reagents supplied by Taylor Technologies. While we may be familiar with their more than 600 test kits, we may not be aware of the many other services that Taylor provides. In addition to test kits and reagents, Taylor also has taken up the challenge to help keep its customers well informed by providing excellent educational material, including How-To videos, color test procedures, and a newsletter, The Cornerstone. This “timely and profitable information”, is one of the many reasons why water treaters have come to rely upon the support of Taylor Technologies.

Taylor has developed online How-To Videos, as well as color photographs of test procedures and end points. Feel free to watch these helpful videos on the Taylor website, www.taylor technologies.com. They have been working hard, putting together this excellent video library. These product demonstrations can be found under the *PRODUCT INFO* button at the top of the screen, then under *VIEW ONLINE DEMO*. You will be interested in those videos under *NON-POOL/SPA* and *GENERAL INTEREST*. There is also a webinar posted in the library that Chris Golden (Sales Manager, Water Treatment Industry) gave earlier this year to a group of water treaters. There are also a number of articles in the *LEARN MORE* section of the website under *CHEMISTRY TOPICS*.

Another useful tool provided by Taylor, is their Newsletter, The Cornerstone. Rather than explain the newsletter, I have decided to simply reprint a recent issue, in its entirety, within this Water Talk. The Cornerstone below is **reprinted with permission from Taylor Technologies, Inc.** You can sign up to receive the newsletter, on the Taylor website, under the *NEWS* link.



TAYLOR TOPIC

How-To Videos Now Online

Every day Taylor's Marketing Department



undertakes a mixed bag of tasks, from producing and mailing this newsletter as well as others; to maintenance of our website; to market research; to creating ads, collateral materials, and even product packaging; to designing and building our tradeshow booths; and more. Lately "more" has primarily meant video production.

The goal has been to make a series of how-to videos starring our most popular test kits. We've begun posting them on taylortechnologies.com in the **Product Info/View Online Demo** area. Ultimately, we have grand visions of a distance-learning program, and sales calls via the Internet. The first step toward this was a webinar I hosted recently for members of the Association of Water Technologies entitled "Stop Sabotaging Your Test Results," which incorporated several video snippets.

No one here had video expertise, but we've come a long way in a short time. We researched and sourced cameras, lights, and sound equipment. We built our own little studio. By trial and error, we're learning how script writing differs from the other writing projects we undertake. (Creating "natural dialog" from a chemistry vocabulary is no picnic!) Several Taylorites have been shanghaied into serving as on-camera talent. More are learning the production side. Sound editing has proven particularly challenging!

We've got about 50 videos in the can now, each a little more professional than the last. The AWT webinar is posted

See **Online Videos** on page 3

pH and Conductivity Solutions

Because the electrical signal generated for the same pH value will change over time as an electrode ages, pH meters require routine adjustment to compensate for the drift. Most meters recognize only the 4.0, 7.0, and 10.0 pH buffers for this calibration. Ordinarily, such meters are adjusted using a two-point calibration at pH 7.0 (neutral) and either pH 4.0 for acidic samples or pH 10.0 for basic samples. If the sample pH is well below 4.0 or well above 10.0, a single-point calibration may be acceptable for your purposes at pH 4.0 or 10.0; ask the meter manufacturer. If your meter recognizes additional pH standards besides 4.0, 7.0, and 10.0, a two-point calibration can be done using the 7.0 buffer solution and one of these as the second standard. If you want to measure both acidic and basic samples, and your more advanced meter is capable of calibrating at three or more points, be sure to bracket the range of readings you anticipate.

To make them instantly identifiable, Taylor color codes the three pH buffers commonly used for meter calibration. pH 4.0 (R-1099-04) is pink, pH 7.0 (R-1099-07) is yellow, and pH 10.0 (R-1099-10) is blue. The other pH buffers we offer—2.0, 7.6, 8.0, 9.0, 11.0, and 12.0—are colorless. We also sell pH Soaker Solution (R-0834) for your electrode; this is our pH 4.0 buffer but without color-coding dye.

All our buffer solutions are prepared with high-purity water and American Chemical Society grade chemicals using proven formulations. Their pH is verified to ± 0.01 pH units.

Taylor makes conductivity solutions ranging from 50 μS to 5000 μS for

calibrating your conductivity meter, too. You may be interested in another one of our standard solutions for conductivity testing: Conductivity Neutralizing Solution (R-7022) allows you to neutralize a sample's alkalinity in one step instead of using the two-part phenolphthalein/gallic acid method.

Our pH buffers and conductivity solutions come in several sizes, from 2 oz. bottles to fit in a carrying case to gallons for repouring. To review your choices, refer to the price list posted on our website, taylortechnologies.com, under the Services/Marketing Support button. You will find a Standard Solutions product flier here, as well.

If you presently make up your own pH buffers and conductivity solutions, consider these facts. Buying prepared reagents from Taylor can:

- save you from dealing with hazardous-material storage and disposal issues,
- lessen the potential expense for wasted raw materials,
- save you preparation time,
- increase product consistency, and
- move your account to the next discount level if you are a reseller.



You can buy Myron L's Ultrameter II™ 6Psi (pH, conductivity, TDS, ORP, resistivity, temperature) packaged with Taylor standard solutions. Order as K-6550.

Contact Us

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To place an order, inquire about order status, report a problem with a shipment, get product information, or request literature, contact customer service.

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REPOURING RULES

Refilling reagent bottles from bulk containers (pints, quarts, gallons, etc.) can be an economical choice. When repouring from one container to another, follow these guidelines to prevent contamination of reagents:

- To ensure accurate test results, verify your bulk reagents are less than one year old. As a general rule, reagents should be replaced yearly.
- Before uncapping the bulk reagent container, wipe it down to remove any dust or dirt that may have accumulated while in storage.
- Clean the container you'll be refilling (and its cap) with demineralized water, and make sure it's completely dry before filling it. If you'll be using a funnel, clean and dry it thoroughly before use, too.
- Be sure the refilled container is properly labeled and includes the reagent name, applicable hazard information, repour date, and Taylor lot number.

Brain Strain posed by Chris Golden, CWT

Early in my career, a senior rep told me to "assume everything is wrong with an account when you start treating it. Prove to yourself the systems are engineered properly and the programs are correct." It was sound advice and I applied it when I started treating a certain ice cream plant. I found my new account was using a bleed from one tower's recirc water as make-up water for another tower. What do you think that second tower looked like? What's wrong with what they were doing? E-mail your answer to brainstrain@taylortechnologies.com. Everyone who plays will get a copy of the advice I gave the ice cream manufacturer. The four best responses from folks who haven't won this contest before will have a sweet reward, as well! I look forward to hearing from you.



2010 Performance Metrics



A new year is upon us so we have a fresh opportunity to prove our worthiness as your business partner. Here's what a review of the company's performance metrics for 2010 showed:

- ✓ 37.9% of all orders shipped the same day the order was entered, and 84.7% had shipped by the next day; this stat includes customized items
- ✓ customer reported we packed a wrong item in an order in 0.57% of total shipments (note: most shipments consist of multiple, even hundreds of, items)
- ✓ customer reported a quality concern in 0.3% of orders shipped; 100% of these were resolved to the customer's satisfaction

If you are a current customer, you know these statistics translate to top-drawer service on your account. If you haven't tried us in a while, order something and let us wow you!

Improved XO Indicator Powder

Users told us the color change in our K-1583 phosphonate test was not dramatic enough, that the change from yellow to purple-pink in the treated sample was not very easy to detect. We listened and in 2010 we were able to source different raw material for the XO Indicator Powder that provides a more distinct endpoint. If you have not purchased this kit lately, you can see for yourself by viewing the K-1583 product demonstration posted on the Taylor website under the Product Info button—although in person the colors are even better than video could capture. When performing the phosphonate test, remember to look down through the sample tube so the white endcap can provide proper contrast.



Do Not Wait to Test Chlorine

Chlorine is relatively unstable and dissipates quickly, even in capped sample bottles. For the most accurate results, test soon after the sample is collected. If, for instance, you take a sample of cooling water at the tower and walk it back to the lab to test sometime later, you will likely find a lower residual than you would have by testing at the sampling site. This could lead to overfeeding the biocide and higher treatment costs than necessary. Taylor's K-1515-C employs the FAS-DPD titration method for determining chlorine levels as low as 0.2 ppm and as high as 20 ppm, in 0.2 or 0.5 increments. The test is fast and field friendly. Watch the product demonstration on our website.

On a related note, since some plastic bottles can exhibit chlorine demand, to get the most accurate chlorine test results use a capped glass container for transporting your water sample. Prep it by rinsing thoroughly with the water to be tested. Or, just collect the specimen directly into the K-1515-C sample tube and analyze it immediately.



We are no longer printing catalogs and price lists to mail out. Instead, all information is posted on our website where it can be updated regularly. Look under the Services button at the Marketing Support options. You can bookmark or print out screens of interest.

There is also much useful reading under the Learn More button, particularly under the Chemistry Topics option. Another area highly recommended, particularly for new users, is the video library found at View Online Demo under the Product Info button.



Online Videos

(continued from page 1)

too. Please check them out and, if you like what you see, recommend them to your colleagues and accounts.

Chris Golden, CWT
Sales Manager, Water Treatment Industry

The FAS-DPD titration method does not require the analyst to match colors. Rather, the reading is taken when the treated solution changes from a color (pink) to color/less. Perfect if you're color challenged!

INCORRECT MAILING INFORMATION: If you are receiving multiple mailings, have updated address information, or would like to be removed from our mailing list, please fax your request and the back page of this newsletter to 410-771-4291. Thank you.

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Please share this newsletter with colleagues.



Best Practice Recommendation for PET Bottlers

To avoid stress crack failure in PET soft drink bottles, packaging technology experts suggest regularly performing titration tests for hardness and alkalinity on contact waters, especially during warmer and more humid seasons. Our **K-1542 Test Kit for PET Bottlers**, which measures total hardness and M alkalinity as ppm CaCO_3 , is ideal for this purpose. According to Eric Morrison, a Senior Scientist in the Food & Beverage Division of Ecolab who has extensively investigated the mechanism of stress cracking in polyethylene terephthalate beverage bottles, water hardness can mitigate the deleterious effect of total alkalinity when hardness is kept at least in a 1:1 ratio with alkalinity in aqueous solutions that come into contact with PET bottles. You can learn more about Morrison's research in the April 2010 issue of *Polymer Degradation and Stability*.



K-1542 ▶



The Cornerstone

Taylor publishes *The Cornerstone*[™] to share timely and profitable information with those responsible for testing water in commercial, industrial, and institutional settings.

Feedback from newsletter readers is always welcome. E-mail your comments and article suggestions to us at: marketing@taylortechnologies.com.

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Please clearly mark any address changes on the printed address above and fax this page to 410-771-4291.

Not for You?

If you received this newsletter in error or do not wish to receive future issues, please check the white box below and fax this entire page to 410-771-4291. We apologize for any inconvenience.

Please remove me from the mail list for *The Cornerstone*.