

## *Top Ten frequently asked questions for pHTestrs*

Tech Tip #21 ©1997

### **1. Why won't my pHTestr turn on?**

Possible reasons: batteries improperly installed or dead. Possibly keypad is defective.

Remedy: reinstall batteries or install new batteries. Replace the pHTestr.

### **2. Why does my pHTestr intermittently not turn on or off, or take other keypad commands the first time I press the buttons?**

Possible reasons: Keypad is defective.

Remedy: Replace the pHTestr.

### **3. Why does my pHTestr take so long to get a stable reading?**

Possible reasons: electrode was dry or not properly conditioned. Reference junction is on the verge of clogging up.

Remedy: Pre-soak the electrode before using. Use manufacturer's suggested electrode cleaning solution.

### **4. How often do I need to calibrate my pHTestr?**

Suggestion: probably at least once every day you use it.

### **5. What kinds of uses should I avoid with the pHTestr?**

Suggestion: Never use the pHTestr in liquids with high concentrations of heavy metals, sulfides, proteins, oil, or in TRIS buffers; in temperatures above 122°; in solvents known to melt or corrode nylon; or in a slurry where large particles can break the glass pH electrode bulb.

### **6. What applications are ideal for the pHTestr?**

Suggestions: Treated waste water, potable water, boiler feed and cooling tower water, swimming pools, all types of naturally occurring waters (lakes, streams, ground and ocean water), agriculture/aquaculture/hydroponics chemical applications, water purification processes (R.O. and deionizing), food and beverage water testing, chemical process water, and many more.

### **7. How can I tell if a pHTestr has had abuse?**

Suggestion: If the sticker in the battery compartment shows ink bleeding, the tester had water in it. Look for signs of rust in the tester. Other abuse includes broken pH electrode bulb, cracked casing, and smashing the reference junction plug at the bottom of the pHTestr.

Exposure to chemicals listed in item 5 above will cause a black or dark brown stain on the reference junction plug. Technically, this is abuse too. Repeat offenders need to select a pHTestr BNC or pH Wand® with double junction electrode.

**8. How do I de-code error messages on my pHTestr?**

Suggestion: E1 means low battery. E2 means the wrong buffer is selected for calibration (choose pH 4, 7 and/or 10). E2 can also mean the reference electrode and reference junction plug are fouled/contaminated and the pHTestr needs to be replaced. OR means the signal is out of the pHTestr measurement range. Any other error messages are indicative of a pHTestr hardware problem and the pHTestr should be replaced.

**9. What accessory items should I have to keep my pHTestr functioning properly?**

Suggestions:

Fresh calibration buffers, pH 7 plus at least one of either pH 4 or pH 10.

Electrode storage solution to moisten a piece of paper towel or sponge and place this in the cap to keep the electrode humidified and slow down its drying out.

Electrode cleaning solution for weekly soaks to keep electrode in peak performance.

Carrying case (belt loop or calibration kit) to protect the pHTestr

Lanyard to keep the pHTestr from getting lost

Laminated copy of the instructions kept near the point of use for easy reference

**10. Can I use the pHTestr for EPA or ASTM procedures?**

Yes, since in most cases these test procedures require resolution and accuracy of 0.1 pH and two point calibrations. Only the pHTestr 1 is limited to one point calibration and 0.2 pH accuracy.

Check the test requirements before selecting the correct pHTestr model. You may need to select the pHTestr 3 or pH Wand® for 0.01 pH accuracy with two point calibration.