Care and Storage of a pH

(*pH electrodes do not last forever*)

The life of your pH electrode is not infinite. A number of factors affect the life span of your pH electrode. The higher the temperature that the electrode is used at, the more extreme the pH, how often the bulb dries out and needs to be rehydrated, how roughly it is used; all these factors and more, shorten the life span of your electrode.

An electrode that is well maintained and cared for, **can last up to 2 years. One that is not well maintained, will not last as long. One that is well maintained, could last significantly longer.**

Link here to "Proper pH Probe Maintenance"

Storage of the pH Electrode When Not in Use

(*The pH electrode bulb needs to be moist at all times*)

- When you are done with the electrode pour electrode storage solution into the cap that came with the electrode and put the cap over the bulb of the electrode.
- Keep the cap on until next use. If the electrode is being stored for a long time you may want to check the cap to be sure the storage solution is still in the cap and keeping the bulb moist.

DO NOT STORE THE pH ELECTRODE IN DISTILLED WATER.

Storing the pH electrode in distilled water will shorten the life of your pH electrode. **If you do not have electrode storage solution, use your pH 4 buffer solution**. If you have neither electrode storage solution nor pH 4 buffer solution, you can use pH 7 buffer solution for a short time.

Rinsing the pH Electrode Between Measurements:

- You should rinse your pH electrode between measurements. This can be done with distilled water or by rinsing with a sample of the next solution to be measured.
- Using both distilled water and then a sample of the next solution is also a good way to rinse the pH electrode between measurements.

pH Electrode Fill Hole

Some pH electrodes have a fill hole for refreshing the electrolyte in the pH electrode; other pH electrodes do not have a fill hole (Gel Filled).

If Your pH Electrode Has A Fill Hole

- The fill hole cap should be *removed during calibration and use*. This allows for the correct amount of reference electrolyte to flow into the sample.
- Replace the fill hole cap when done with the electrode at the end of the day.

If the Bulb Dries Out

- If the pH electrode bulb does dry out, try soaking it in pH 7 buffer for a couple of hours before attempting to calibrate or take measurements.
- If still not responsive or the reading drifts, replace the electrode.
- If still not working correctly, replace the pH meter.

Do not wipe the pH electrode with a cloth or any other type of material.

- When you are done with the pH meter rinse off the electrode with distilled water, put storage solution in the cap, and put the cap on the end of the pH electrode.
- If the electrode is wet do not dry it off, let the distilled water evaporate by itself.

Cleaning the pH Electrode

- How often it needs to be cleaned depends, upon frequency of use and the material being tested.
- An electrode used on dark colored and viscous material usually needs to be cleaned more often than an electrode used on clear thin material.
- Material building up on the glass bulb of the electrode will cause the calibration of the electrode to be inaccurate and any subsequent reading to be inaccurate.

Clean and Re-calibrate, often.

At the start of the day and usually after every four red wine samples

- If still not responsive or the reading drifts, replace the electrode.
- If still not working correctly, replace the pH meter.

The pH electrode needs to be cleaned in order to prevent the build up of material on the surface of the glass bulb.

Accessories

Electrode storage solution:
HI 70300L 500 ml bottle
(or, use pH4 Buffer, being slightly acidic)
General purpose electrode cleaning solution:
HI 7061L 500 ml bottle
(or, use Rubbing Alcohol for ~ 10 minutes)

Electrode Refilling Solutions:
For single junction electrodes: HI 7071L 500 ml bottle
For double junction electrodes: HI 8082 4 30 ml bottle

Hanna Web Site: www.hannainst.com

If you have any questions or need additional information please contact

The Home Beer/Wine/Cheesemaking Shop, Woodland Hills, Ca., an Authorized Distributor for all Hanna Instruments products.

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