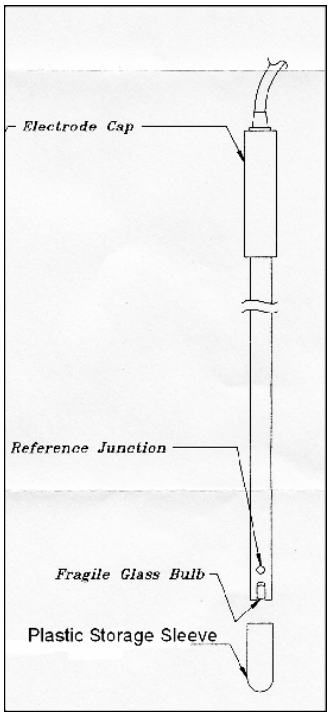
Instructions for Corning Model 220 pH Meter



The electrode tip is a fragile glass bulb. Be careful or you will break it with a spin bar or on the bottom or side of a beaker. Squeezing or compressing a polymer body electrode can create sufficient internal pressure to “explode” the glass bulb.

When the electrode is not being used, it should be stored immersed in pH 7 Buffer (YELLOW). The buffer level should stay above the reference junction on the side of the electrode. For periods up to several days, the electrode can simply be immersed in buffer in an open vial. For longer term storage, place a small wad of cotton in the plastic electrode cover sleeve, add pH 7 buffer, and insert the electrode bulb into the sleeve. Seal the end of the electrode unit by wrapping with parafilm to retard evaporation of the buffer.

Two Point Calibration Routine

- The pH meter should be turned "ON".
- Your buffers should be at the temperature that you want to use them.
- Place electrode tip in pH 7.0 standard buffer (yellow) and allow several minutes to equilibrate.
- Set "Cal 2" knob ("slope") to 100.
- Adjust "Cal 1" knob to read pH 7.0.
- Remove electrode from pH 7 standard buffer, rinse tip thoroughly with distilled water into waste beaker.
- Gently BLOT (don't wipe) excess liquid from tip with a kimwipe.

2. Calibrate the electrode to either pH 4 (if pH of your sample is between 1 and 7) or to pH 10 (if pH of your sample is between 7 and 14)

   - Immerse the electrode into the appropriate standard buffer and set the "Cal 2" knob to display the pH of your standard buffer (i.e. 4 or 10).
   - Remove electrode from the standard buffer, rinse with distilled water and BLOT with a kimwipe.

3. Read/adjust the pH of your sample solution.

   - Lower electrode into your sample solution.
   - Read pH or adjust the pH with the appropriate acid or base.
   - Remove electrode from your sample, rinse with distilled water, and BLOT with a kimwipe.

4. Turn pH meter OFF and store electrode in pH 7 standard buffer.