

## *How To Guide*



### **Filling procedure for the K0265 Ag/AgCl Reference Electrode**

Several of our Princeton Applied Research reference electrodes come packaged with an unfilled sleeve. Before using a new reference electrode, please make sure that the sleeve contains the appropriate filling solution.

#### **Filling Considerations**

One of the most common problems in electrochemical measurements is the presence of trapped air in the Luggin capillary or reference electrode, resulting in continuity problems and unreliable experimental data. In the following instructions, be sure to carefully perform the steps relating to trapped air.

#### **Filling Procedure**

Use this procedure to fill the reference electrode sleeve:

1. Remove the silver reference electrode wire from the glass reference electrode sleeve.
2. Fill a 9-in. Pasteur pipette with the appropriate filling solution.
3. Insert the pipette all the way to the bottom of the sleeve.
4. Begin squeezing the ball of the pipette while slowly drawing it out of the sleeve. Fill to just below the air hole near the open end of the sleeve (about 1/2 in. [13 mm] from the end). **NOTE:** Make sure you begin squeezing when the pipette is at the very bottom of the sleeve and draw the pipette out evenly. If you don't follow this procedure carefully, air bubbles can form.
5. Inspect the solution for trapped air. If you see any, shake out any air bubbles by holding the sleeve at the open end and giving it one or two good shakes. The motion is similar to the motion you use to reset a thermometer.
6. Reinsert the reference electrode wire into the sleeve. Make sure the cap is secured over the sleeve.