Electrical Conductivity Calibration Protocol

Lab Guide

Task

Calibrate your electrical conductivity tester.

What You Need

- ☐ Electrical conductivity tester
- ☐ Standard solution
- ☐ Thermometer
- ☐ Distilled water in wash bottle
- ☐ Soft tissue
- ☐ Two 100-mL beakers or two plastic cups
- ☐ Latex gloves
- ☐ Small screwdriver

In the Lab

1. Bring the standard solution to room temperature (about 25° C).
2. Pour standard solution into each of the two clean 100-mL beakers or cups to a depth of about 2 cm.
3. Remove the cap from the electrical conductivity tester and press the On/Off button to turn it on.
4. Rinse the electrode at the bottom of the tester with distilled water in the wash bottle.
5. Gently blot dry with a tissue. **Note:** Do not rub or stroke the electrode while drying.
6. Put the probe of the meter into the first beaker of standard. Stir gently for 2 seconds to rinse off any distilled water.
7. Take the meter out of the first beaker. Do NOT rinse with distilled water.
8. Put it into the second beaker.
9. Stir gently, and then wait for the numbers to stop changing.
10. If the display does not read the value of your standard solution, you must adjust the instrument to read this number. (For most meters, you can use a small screwdriver to adjust the calibration screw on the meter until the display reads the standard value.
11. Rinse the electrode with distilled water and blot it dry. Turn off the meter and put the cap on to protect the electrode.
12. Pour the standard from the beakers into a waste container. Rinse and dry the beakers.