



INSTRUCTION SHEET

Sample Chamber for Low Ionic Strength and High Purity Samples

The Hach Low Ionic Strength (LIS) Sample Chamber Kit prevents sample contamination by atmospheric carbon dioxide and oxygen. When a sample absorbs carbon dioxide from the atmosphere, carbonic acid forms. Carbonic acid decreases the sample pH and increases conductivity, causing inaccurate readings. Samples can also absorb oxygen from the atmosphere. This disrupts dissolved oxygen measurements.

This kit contains a sample chamber with a cap suitable for:

- Measuring a grab sample while reducing the sample's exposure to the atmosphere
- Measuring a flow or plug-flow sample with no exposure to the atmosphere.

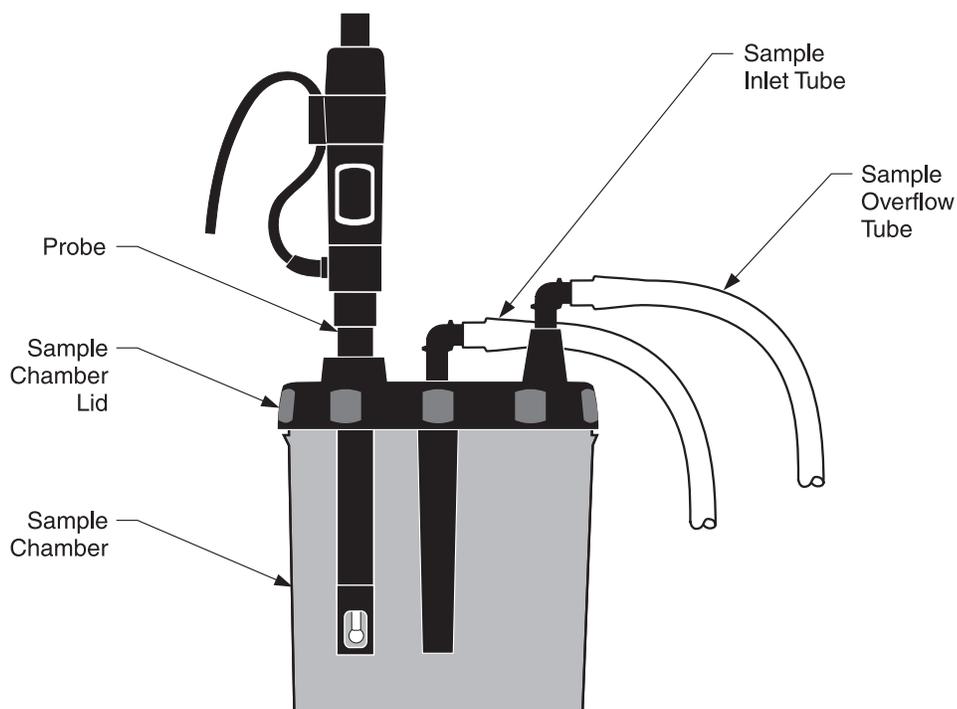
The kit contains two lids that will accommodate Hach Platinum pH, Hach Dissolved Oxygen and Hach Conductivity electrodes. Use the lids with the 0.55 in. diameter electrode port for the conductivity electrode and the lids with the 0.45 in. diameter electrode port for the pH and dissolved oxygen electrodes. The kit also contains 6 ft. of tubing that users can cut into lengths that meet their needs.

Assembly for High Purity Samples

1. Screw the cap and attached electrode onto the clean sample chamber (see *Figure 1*).
2. Cut the 6 ft. tubing to desired lengths. Connect each elbow fitting to a piece of tubing.
3. Connect one elbow fitting to the center flow port. Connect the tubing at the other end to the sample source.
4. Connect the remaining elbow with attached tubing to the sample overflow port.
5. Slowly fill the chamber. Allow excess sample to flow from the overflow tube.
6. Allow three volumes of sample to pass through the chamber. Shut off flow.
7. Store or record the electrode reading after it stabilizes.

Note: Sample temperature must not exceed 50 °C.

Figure 1 Assembly for High Purity Samples



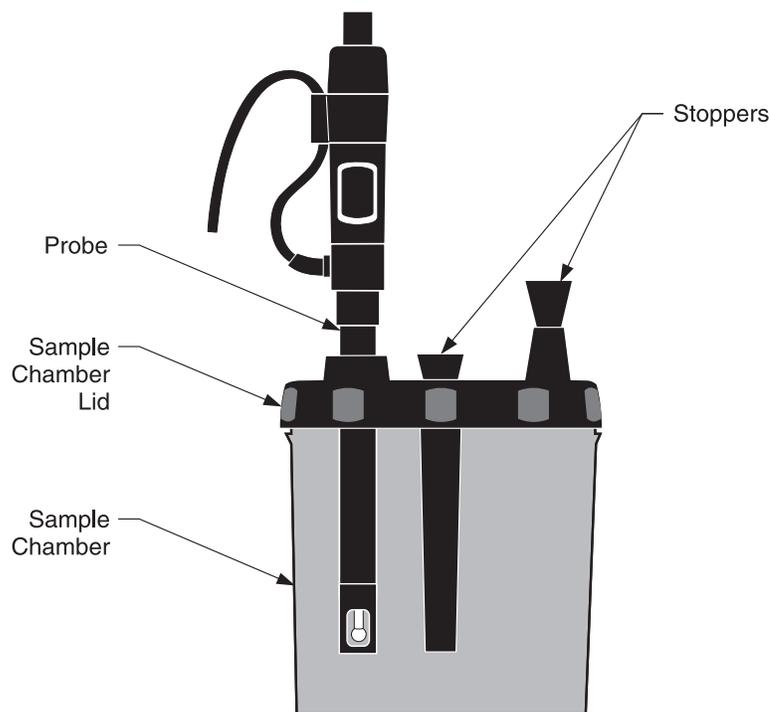
Sample Chamber for Low Ionic Strength and High Purity Samples, continued

Assembly for Low Ionic Strength Samples

1. Plug the inlet and outlet ports with stoppers (see *Figure 2*).
2. If not using a sample collection bottle that fits with the sample chamber lid, transfer the sample to the LIS sample chamber bottle.
3. Completely fill the sample chamber, leaving as little air space as possible in the chamber.
4. Screw the cap and attached electrode onto the sample chamber.
5. Store or record the electrode reading after it stabilizes.

Note: Sample temperature must not exceed 50 °C.

Figure 2 Assembly for Low Ionic Strength Samples



Low Ionic Strength Sample Chamber Kit Contents

Description	Unit	Cat. No.
Fitting, barbed elbow.....	2.....	51865-00
Instruction Sheet.....	each.....	51899-23
Lid, Sample Chamber, for 0.450 in. diam. electrode	each.....	51869-00
Lid, Sample Chamber, for 0.550 in. diam. electrode	each.....	51862-00
Sample Chamber	each.....	27581-01
Stopper	2.....	51867-00
Tubing, Tygon	6 ft.....	5186-37



FOR TECHNICAL ASSISTANCE, PRICE INFORMATION AND ORDERING:

In the U.S.A. - Call toll-free 800-227-4224
Outside the U.S.A. - Contact the HACH office or distributor serving you.
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