

Dissolved Oxygen Test Kit Directions

1. Fill the Dissolved Oxygen bottle (round bottle with glass stopper) with sample water by allowing the sample water to overflow the bottle. Avoid turbulence and air bubbles in the sample while filling.
2. Incline the bottle slightly and insert the stopper (while bottle is still under water) with a quick thrust to avoid trapping air bubbles.
3. Remove the stopper and add the contents of one Dissolved Oxygen Reagent 1 Powder Pillow and one Dissolved Oxygen 2 Reagent Powder Pillow. Stopper the bottle to avoid trapping air bubbles. If air bubbles become trapped, remove the stopper and add a few drops of sample water to increase the sample volume. Replace the stopper with no air bubbles.
4. Shake the bottle vigorously to mix. Flocculent (floc) precipitate will form. Brownish-orange precipitate indicates oxygen is present. White precipitate may be present on the bottom of the bottle, due to excess reagent. This will not affect result.
5. Wait for floc to settle to approximately half the bottle volume. Floc will not settle if high concentrations of chloride are present. In this case wait 4-5 minutes before proceeding.
6. Shake the bottle vigorously again.
7. Wait for the floc to settle half way. Floc will not settle if high concentrations of chloride are present. In this case, wait 4-5 minutes before proceeding.
8. Remove the stopper and add the contents of one Dissolved Oxygen 3 Reagent Powder Pillow. Stopper the bottle carefully to avoid trapping air bubbles.
9. Shake the bottle vigorously to mix. Floc will dissolve and the sample will turn yellow if oxygen is present.
10. Fill plastic tube full (to the top) with prepared sample.
11. Pour the contents of the tube into the square-mixing bottle.
12. Add Sodium Thiosulfate Standard Solution one drop at a time to the mixing bottle. Count each drop. Swirl to mix after each drop. Add drops until the sample becomes colorless.
13. The total number of drops of titrant used in step 12 equals the total mg/L dissolved oxygen.

Tips

There must not be any air bubbles in the Dissolved Oxygen Bottle after adding Dissolved Oxygen 1 and 2 Reagents.

If there is an air bubble present after adding Dissolved Oxygen Reagent 1 and 2, you may add a few drops of sample water (stream water) or clean, plastic bead to increase the sample volume.

A simple method for getting solution out of measuring tube into the mixing bottle is to place the mixing bottle up-side-down on the measuring tube and invert.

Do not dispose of orange solution in stoppered bottle until after titration is complete. If mistake is made during titration, you will not have to repeat entire analysis, but can begin at step 10.

When adding Sodium Thiosulfate, be sure to hold the dropper vertically to ensure a uniform drop size

Do not wear sunglasses or other colored lenses when determining color change.

Hold white background a few inches from square mixing bottle when determining color change.