

What is Dissolved Oxygen (DO)?

DO is the amount of oxygen gas in the water. Fish and other animals need dissolved oxygen to breathe. Oxygen can get in the water through photosynthesis from plants or through mixing of water from wind and movement.

DO is usually measured in parts per million (ppm) or milligrams per liter (mg/L).

Why we measure dissolved oxygen...

DO levels can indicate healthy waters for plants and animals.

...Most aquatic organisms in the Hudson River and New York Harbor need at least 5 mg/L of dissolved oxygen to survive.....

How to use a Hach DO testing kit...

1 Collect a fresh water sample, or fill sample bottle directly from river. Fill to the top, avoid air bubbles.

2 Stopper the bottle while under water to avoid trapping air bubbles. Repeat if air bubbles are present.

3 Cut open one DO 1 Reagent packet.

4 Remove the stopper and add one DO 1 packet.

5 Open and add one DO 2 Reagent packet. Put stopper on. Avoid air bubbles.

6 Invert sample bottle and mix 10 times - floc forms.

7 Wait for floc to settle 1/2 way*
Floc

8 Repeat steps 6 and 7 (mix and settle halfway) one more time.

*In saltwater floc settles slowly so wait 4-5 mins.



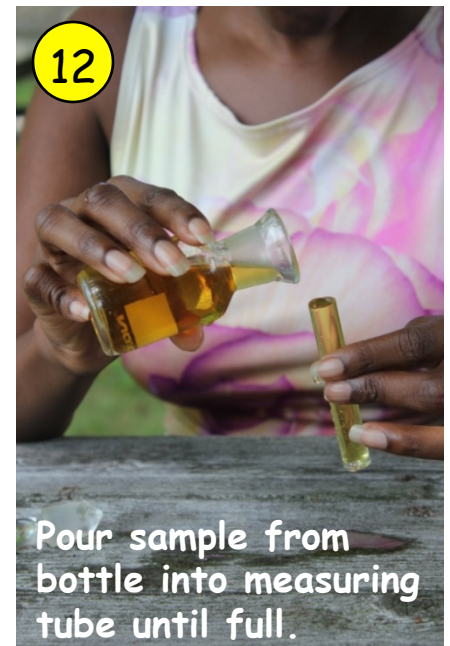
9
Open one DO 3 Reagent packet.



10
Add one DO 3 Reagent packet. Put stopper on.



11
Invert sample bottle and mix 10 times.



12
Pour sample from bottle into measuring tube until full.



13
Place square mixing bottle over measuring tube and flip over. Pour sample into square mixing bottle.



14
Add Sodium Thiosulfate Solution one drop at a time. Swirl to mix after each drop. Careful not to touch dropper to side of square bottle.



16
Count the drops until the color changes from yellow to clear.



17
Put bottle up against a white background to see clear color.

The number of drops is equal to the amount of DO in mg/L or ppm.