

## Dissolved Oxygen Merck DO Kit

### ***Equipment***

Distilled or deionized water

Safety gloves and safety glasses

Merck dissolved oxygen kit

### ***Method***

1. Rinse the oxygen reaction bottle with the water to be tested.
2. Fill the bottle to overflowing by submerging the stoppered bottle in the water body and remove the stopper under water.
3. Add 5 drops of Reagent 1 and 5 drops of reagent 2. Close without trapping air bubbles with the slanted stopper and shake for approximately 30 seconds.
4. Add 10 drops of reagent 3. Reseal and shake well again.
5. Rinse the test tube with a small amount of the resultant reaction solution and fill to the 5 ml mark.
6. Place the test tube on the colour card and match the colour to the closest standard colour on the card. You should attempt to estimate the concentration if the colour match appears between the colour standards provided.
7. Report the concentration of dissolved oxygen as mg/L on your result sheet.
8. To convert the mg/L result to % saturation using the conversion graph, mark the temperature of the test sample on the temperature scale. Mark the DO level in mg/L on the concentration scale. Connect the two points and note the value where the line crosses the % saturation line.
9. Report the percentage saturation of dissolved oxygen on your result sheet.