

Chemical Oxygen Demand (COD)

Code : XL-316

Range : 20 - 400 & 100 – 2,000 ppm as COD

AQUA-XL

Water Analysing Kits

Directions for use :

1. Rinse screw capped Glass tube 2-3 times with distilled water and add 13 drops of Reagent COD-1L.
2. Now add 1 ml of water sample with the help of syringe (or pipette), into the above glass tube.
3. Take Reagent COD-2 in a plastic tube upto the 2ml mark and transfer it to the above sample solution tube. Close the cap tightly. Mix well by swirling (use of safety goggles and hand gloves is recommended)
4. Take approximately 20-30 ml of paraffin oil in a 100 ml glass beaker. Heat it on a hot plate till temperature of oil rises upto 150°C (Use thermometer)
5. Now immerse the above screw capped glass tube into the hot paraffin oil.
6. Maintain the paraffin oil temperature between 140°C – 150°C and digest the sample for minimum 2 hours.

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7. After 2 hours digestion, take the glass tube out and place it in a test tube stand. Let it cool slowly.
8. When the solution attains room temperature, remove cap and add 1 drop of Reagent COD-3. Mix well and start adding COD-4L counting the number of drops while mixing **until the colour changes from BLUSH GREEN to REDISH BROWN (say X drops).**
9. Carry out Blank Titration using 1 ml distilled water in a 10 ml glass jar. (Omit step Nos. 4,5,6 & 7). Note down the number of drops of COD-4L required to get **colour change from BLUSH GREEN to REDISH BROWN. (say Y drops)**

Calculations :

COD ppm = (Y-X) x 20.

- # If the expected COD of the test sample is more than 400 ppm, then take 2 ml of the sample in a 10 ml glass jar and dilute it upto 10 ml mark with distilled water. Mix well and use 1 ml of the above diluted sample and follow Direction for use. **Multiply the result obtained by 5.**

Caution : Reagent COD 2 is highly Acidic. Handle carefully and avoid contact with skin.

Chemical Oxygen Demand (COD)

Code : XL-306

Range : 40 - 800 & 200 - 4,000 ppm as COD

AQUA-XL
Water Analysing Kits**Directions for use :**

1. Rinse screw capped Glass tube 2-3 times with distilled water and add 13 drops of Reagent COD-1.
2. Now add 1 ml of water sample with the help of syringe (or pipette), into the above glass tube.
3. Take Reagent COD-2 in a plastic tube upto the 2 ml mark and transfer it to the above sample solution tube. Close the cap tightly. Mix well by swirling (use of safety goggles and hand gloves is recommended)
4. Take approximately 20-30 ml of paraffin oil in a 100 ml glass beaker. Heat it on a hot plate till temperature of oil rises upto 150°C (Use thermometer)
5. Now immerse the above screw capped glass tube into the hot paraffin oil.
6. Maintain the paraffin oil temperature between 140°C – 150°C and digest the sample for minimum 2 hours.

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7. After 2 hours digestion, take the glass tube out and place it in a test tube stand. Let it cool slowly.
8. When the solution attains room temperature, remove cap and add 1 drop of Reagent COD-3. Mix well and start adding COD-4 counting the number of drops while mixing **until the colour changes from BLUSH GREEN to REDISH BROWN (say X drops).**
9. Carry out Blank Titration using 1 ml distilled water in a 10 ml glass jar. (Omit step Nos. 4,5,6 & 7). Note down the number of drops of COD-4 required to get **colour change from BLUSH GREEN to REDISH BROWN. (say Y drops)**

Calculations :

$$\text{COD ppm} = (Y-X) \times 40.$$

- # If the expected COD of the test sample is more than 800 ppm, then take 2 ml of the sample in a 10 ml glass jar and dilute it upto 10 ml mark with distilled water. Mix well and use 1 ml of the above diluted sample and follow Direction for use. **Multiply the result obtained by 5.**

Caution : Reagent COD 2 is highly Acidic. Handle carefully and avoid contact with skin.