

**RAKIRO BIOTECH SYSTEMS PVT LTD**

R-466, TTC Industrial Area, MIDC

Rabale, Navi Mumbai - 400701

Tel No. +91-022-47804040

Email :- sales@rakiro.net

**Doc No :** TDSAPCODR3**Date :** 01-02-2024**Type :** AQUASOL**Product Code:** APCODR3**PRODUCT DATA SHEET****1 INFORMATION**

CODE: APCODR3

PARAMETER: Chemical Oxygen Demand

RANGE: - 0 - 15000 ppm as O<sub>2</sub>**2 METHOD**

The water sample is oxidized with a hot sulfuric solution of potassium dichromate, with silver sulfate as the catalyst. Chloride is masked with mercury sulfate. The concentration of unconsumed Cr<sub>2</sub>O<sub>7</sub><sup>2-</sup> ions is then determined photometrically. Results are expressed as mg/l COD ( mg/l O<sub>2</sub> )

**3 APPLICATION**

Drinking Water, Mineral Water, Well Water, Swimming Pool Water, Surface and Ground Water, Aquaculture, Boiler Water, Process Water, Industrial Wastewater, Effluent Water, Cooling System Water, Chiller Water etc

**4 INTERFERENCE**

Straight-chain aliphatic compounds, aromatic hydrocarbon fatty acids, chlorides, nitrites and iron are the main interfering radicals.

**5 REAGENTS AND ACCESSORIES**

Reagents: CODC2 (1nos) , CODS3 100ML (4nos), 25ML (1nos), CODM1 (1nos)

Accessories: Plastic Syringe 1 ml (1nos) , comparator tube (with mark), spoon, Procedure Label(1Nos).

**6 STORAGE**

The test reagents are stable up to the date stated on the pack when stored closed at ambient temperature.

**7 REFERENCE**

IS 3025 (Part 58) :2006 Indian Standard

**8 DIRECTION FOR USE**

Vial Preparation Using Refill:

- 1.Take a Clean (Acid Washed) COD Vial (16MM X 100MM). (use H<sub>2</sub>SO<sub>4</sub> for cleaning)
- 2.Add 0.25ml of Reagent CODC2 using a syringe (Provided) to the Vial.(make sure there is no reagent left in the syringe). (Alternatively you can pipette out 0.25ml of CODC2 Reagent and transfer into the vial.)
- 3.Carefully Add Reagent CODS3 in the small glass tube (provided) up to the mark and transfer content in the vial. (Alternatively you can pipette out 4.3ml of CODS3 Reagent and transfer into the vial.)
- 4.Add Half Spoon of Powder CODM1 using a spoon (Provided). Close the Vial and swirl for 15 sec.
- 5.Now COD Vial is ready for COD Test Range 0 - 15000 PPM. Repeat the process to fill multiple vials.

COD Testing Procedure:

- 1.Take a Vial, Open the cap and add 0.2 ml of Demineralized Water (COD Free). Mark the vial as Blank
- 2.Take another Vial Open the cap and add 0.2 ml of test sample. Mark the vial as Sample
- 3.Close caps of both the vials tightly and swirl the contents for 10-15 sec.
- 4.Now digest both the tubes in COD Digester, at 150 Deg C for 2 Hours. (Refer APCODG1 Manual)
- 5.After Digestion, swirl the vial and cool the vials naturally to room temp for 15-20 mins.
- 6.Read the COD Value using COD Meter/Analyzer. (Refer APCOD01 Manual)