

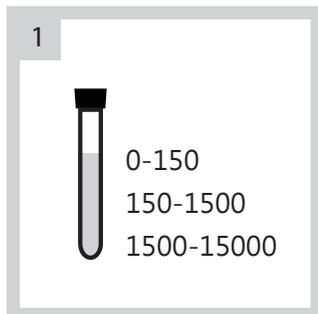
# Chemical Oxygen Demand (COD) Test Procedure

## ► Required Equipment

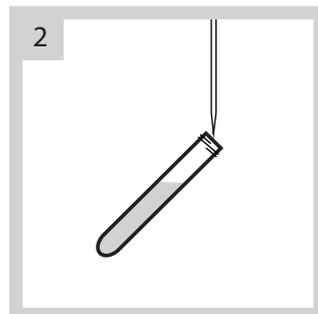
1. CR 25, COD Reactor
2. WD 100, Multiparameter Colorimeter
3. Hach, COD Reagent Set
4. Pipette and Pipette Tip

## ► Inspection Before Test

1. If the chloride concentration in sample is over 2000 ppm, it must be removed to avoid affecting result.
2. Blend sample contains suspended solid thoroughly to get representative result.

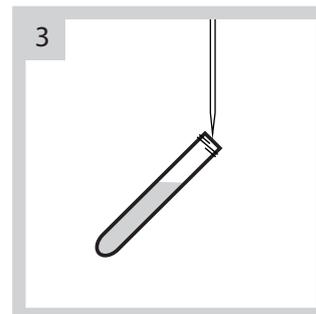


Select the appropriate concentration of reagent according to the COD concentration of sample.



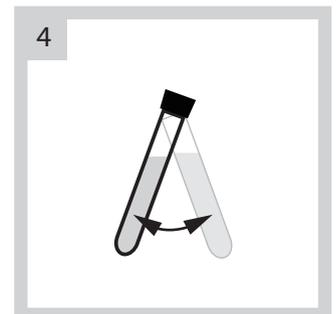
Hold vial at 45-degree angle. Add 2 ml pure water to one COD reagent vial as the blank sample.

• The adding volumes change to 0.2 ml when using 15000 ppm COD vial



Hold vial at 45-degree angle. Add 2 ml sample to another COD reagent vial as the test sample.

• The adding volumes change to 0.2 ml when using 15000 ppm COD vial



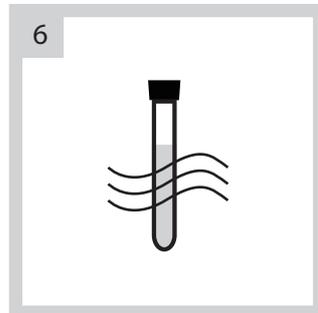
Tighten the vial cap and shake slightly to mix evenly.

• The vials will turn hot during mixing

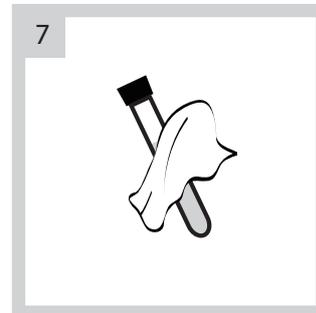


Put vials into CR 25, COD reactor then start COD program to heat at 150°C for 2 hours.

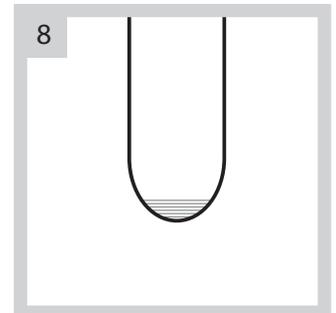
• Close the protective lid for safety



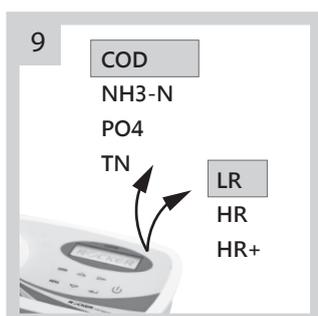
Turn off CR 25 reactor after digestion and wait vials to cool to room temperature.



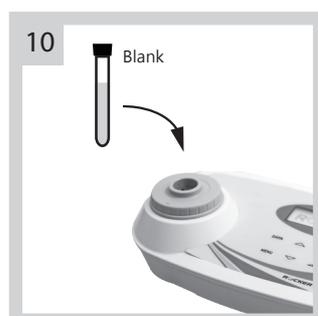
Remove vials from CR 25 reactor and clean vials.



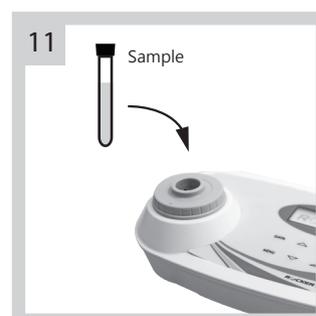
Make sure the solution is well-mixed and fully precipitated.



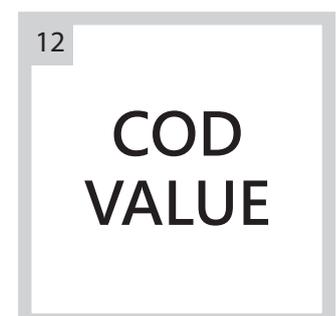
Turn on WD 100 colorimeter then select reagent brand and concentration range.



Insert the blank sample vial into WD 100 colorimeter to start a zero calibration.



Insert the test sample vial into WD 100 colorimeter to start a test.



Get COD concentration.