

PRODUCT CODE: SP-KS-096

Cooling Water Test Set Parameters; HARDNESS, NITRITE, CHLORIDE & pH

HARDNESS TEST:

Total Hardness Method:

- 1) Rinse the test tube with the water to be tested. And fill to the 5 ml mark.
- 2) Add 2 drops MB Indicator (Eriochrome Black T), place the stopper and shake it.
- 3) If color is blue, there is no hardness in the water to be tested.
- 4) If color is pink, add Total Hardness Titration Solution drop by drop until color changes pink to blue again.
- 5) Total drops of hardness titration solution = Total French Hardness of water to be tested.
- 6) Each drop of titration solution is equal to one French hardness degree.

Note: 1 Fr0 = 10 mg/l(ppm) CaCO₃ = 0,2 epm = 0,2 mval/ l

1 epm = 50 mg/l(ppm) CaCO₃ = 1 mval/l

NITRITE TEST:

- 1) Remove only as many test strips as are required. Close the container immediately after removing a strip. Do not touch the test field.
- 2) Dip the test strip into the test solution (pH 2-12) for 1 sec.
- 3) Shake off excess liquid.
- 4) Wait 60 sec.
- 5) Compare with the color scale. If nitrite ions are present, the test field turns orange to red.

Measuring range: 0.1-3 g/L NO₂⁻, 100-3000 PPM NO₂⁻

Color Gradation:

- 0=0 PPM NO₂⁻
- 0.1=100 PPM NO₂⁻
- 0.3=300 PPM NO₂⁻
- 0.6=600 PPM NO₂⁻
- 1=1000 PPM NO₂⁻
- 2=2000 PPM NO₂⁻
- 3=3000 PPM NO₂⁻

CHLORIDE TEST:

Chloride (Sensitivity 1 drop = 30 mg/l (ppm)) Method :

- 1) Rinse the test tube with the water to be tested and fill it using 5 ml injector.
- 2) Add 3 drops Chloride Indicator Solution and color change to yellow
- 3) Add Silver Nitrate Solution drop by drop until color changes to reddish brown.
- 4) Total drops of titration solution x 30 = Concentration of chloride (Cl-) in mg/l(ppm)

Ph TEST:

Use pH papers (0-14).