Monochloramine CHEMets® Kit

K-6802/R-1402: 0 - 20 ppm NH_2Cl-Cl_2

Test Procedure

1. Fill the sample cup to the 20 mL mark with the sample to be tested (Fig. 1).
2. Add 4 drops of S-1404 Stabilizer Solution. (Fig. 2).
3. Add 4 drops of S-1405 Catalyzer Solution (green) (Fig. 2).
4. **Immediately** place the CHEMet ampoule, tip first, into the sample cup. Stir briefly to mix the contents of the cup, then snap the tip. The ampoule will fill leaving a bubble for mixing (Fig. 3).
5. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.
6. Dry the ampoule. Obtain a test result **5 minutes** after snapping the tip.
   NOTE: Color development is impacted by sample temperature. For sample temperatures below 10°C, wait 7 minutes.
7. Obtain a test result by placing the ampoule between the color standards until the best color match is found (Fig. 4).
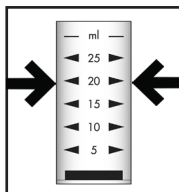   NOTE: To convert to ppm NH_2Cl-N (monochloramine as nitrogen), divide test result by 5.
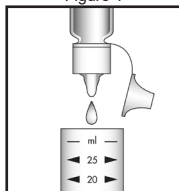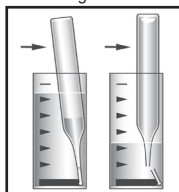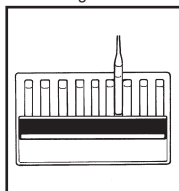

Figure 1

Figure 2

Figure 3

Figure 4

Test Method

The Monochloramine CHEMets®[1] test kit employs the Hydroxybenzyl alcohol (HBA) chemistry.[2] Monochloramine reacts with HBA, in the presence of sodium nitro-ferricyanide, to form a green colored complex. This test method measures monochloramine as chlorine (NH_2Cl-Cl_2).

CHEMetrics offers ammonia test kits employing the HBA chemistry that can be used in conjunction with this kit to determine free ammonia concentration. See technical bulletin on the website for details.

Monochloramine levels above the test range may cause a deep blue-green color to develop. High levels of residual ammonia can produce false low test results.

1. CHEMets is a registered trademark of AquaPhoenix Scientific, LLC U.S. Patent No. 3,634,038
2. Krom, Michael D., Spectrophotometric Determination of Ammonia: A study of a Modified Berthelot Reduction Using Salicylate and Dichloroisocyanurate, The Analyst, V105 pp. 305-316, 1980.

Safety Information

Read SDS before performing this test procedure. Wear safety glasses and protective gloves.

CHEMetrics®
By AquaPhoenix Scientific