Ammonia CHEMets® Kit

K-1510/R-1501: 0 - 1 & 1 - 10 ppm N

Sample Temperature

Sample temperatures that deviate significantly from 20°C (68°F) may introduce test result bias.

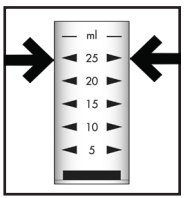

Figure 1

Non-Seawater Test Procedure

1. Fill the sample cup to the 25 mL mark with the sample to be tested (fig. 1).
2. Add 2 drops of S-1500 Stabilizer Solution (fig. 2). Stir to mix the contents of the cup.
3. Place the CHEMet ampoule, tip first, into the sample cup. Snap the tip. The ampoule will fill leaving a bubble for mixing (fig. 3).
4. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.
5. Dry the ampoule. Obtain a test result **1 minute** after snapping the tip.
6. Obtain a test result using the appropriate comparator.
   a. **Low Range Comparator (fig. 4):** Place the ampoule, flat end first, into the comparator. Hold the comparator up toward a source of light and view from the bottom. Rotate the comparator until the best color match is found.

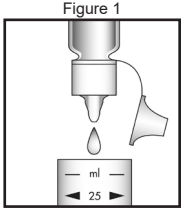

Figure 2

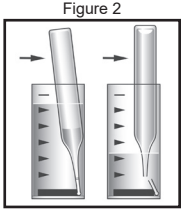
Figure 3


Figure 4

   b. **High Range Comparator (fig. 5):** Place the ampoule between the color standards until the best color match is found.

   NOTE: Use the 1 - 10 ppm concentration scale on the comparator label.

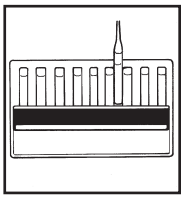
Figure 5

Seawater Test Procedure

Product Change Notice: S-1501 Stabilizer Solution and 1 mL syringe, Catalog No. A-0027 are sold separately for use in seawater testing.

1. Add 1.0 mL of S-1501 Stabilizer Solution to the empty sample cup.
2. Fill the sample cup to the 25 mL mark with the seawater sample to be tested (fig. 1).
3. Perform the Test Procedure above, beginning with Step # 3.

Test Method

The Ammonia CHEMets®[1] test kit employs direct nesslerization.[2,3] In a strongly alkaline solution, ammonia reacts with Nessler Reagent (K_2HgI_4) to produce a yellow-colored complex in direct proportion to the ammonia concentration.

This method is applicable to drinking water, clean surface water, good quality nitrified wastewater effluent and seawater. Other types of samples may require a preliminary distillation step.

1. CHEMets is a registered trademark of AquaPhoenix Scientific, LLC U.S. Patent No. 3,634,038
2. APHA Standard Methods, 18th ed., Method 4500-NH_3 C - 1988
3. ASTM D 1426 - 08, Ammonia Nitrogen in Water, Test Method A

Safety Information

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

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